

ARC 501o_2024S_Architecture Studio II

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Student Name: **Nicollas Jeronymo**

Module 1 Research

Assignment 1.1 Digital Context Model

This assignment will be to complete, as a class section, a digital context model in Rhinoceros 3D format.

Assignment 1.2 City Context

This assignment will be to complete independent topical research and produce a summarizing document representing the work.

Assignment 1.3 Site Context

This assignment will be to complete group site analysis and research and produce a summarizing document representing the work.

Assignment 1.4 Precedent Analysis

This assignment will ask students to conduct a precedent analysis of a housing project.

Assignment PE1 Research Package

At the conclusion of each module, students will submit a package that synthesizes the most relevant information created over the course of the module and summarizing documentation memorializing the focus of the module.

Module 2 Conceptual Design

Assignment 2.1 Community Values & Domesticity

This assignment will ask students to acquire a deeper understanding of the community members and culture associated with the surrounding context, considering the past, present, and how that informs your proposal that will contribute to envisioning its future.

Assignment 2.2 Community Framework Plan

This assignment will ask students to select a project site and begin to define and document specific responses to surrounding context, while continuing to address the areas identified in the research and accommodating the range of community members defined in Module 2.1.

Assignment 2.3 Building Logics

This assignment will ask students to fully define project programming and organize that programming on their selected project sites as informed by research conducted to date, priority areas defined in Module 2.1, and related contextual and site analysis identified in Module 2.2.

Assignment 2.4 Precedent Analysis

This assignment will ask students to conduct a precedent analysis of a housing project.

Assignment PE2 Conceptual Design Package

At the conclusion of each module, students will submit a package that synthesizes the most relevant information created over the course of the module and summarizing documentation memorializing the focus of the module.

Module 3 Schematic Design

Assignment 3.2 Sustainability + Systems Integration

This assignment will ask students to further investigate, define, and employ ecologically minded passive design strategies, systems, technology, and construction (especially structure) design within their projects.

Assignment 3.3 Regulatory Context + Constructibility

This assignment intends to emphasize the importance of prioritization and decision making relative to the design process working with a finite set of resources. As an output, students will be asked to further knowledge related to construction and performative building metrics, including construction types, occupancies, and code considerations such as life safety and accessibility.

Assignment 3.4 Precedent Analysis

This assignment will ask students to conduct a precedent analysis of a housing project.

Assignment PE3 Schematic Design Package

At the conclusion of each module, students will submit a package that synthesizes the most relevant information created over the course of the module and summarizing documentation memorializing the focus of the module.

Module 4 Final Proposal

Assignment 4.1 Progress Draft

This assignment will ask students to work alongside your instructors and colleagues to advance your design to a final level of development and create a draft outline of the final presentation package for your project.

Assignment 4.2 Final Draft

Students will be asked to submit a final draft of their presentation materials.

Assignment 4.3 NAAB Collection

This assignment will ask students to collect and compile work conducted throughout the semester.

Assignment 4.4 Final Proposal Package

Students will be asked to present the Final Presentation Package and interact with a live jury of internal and external critics in discussion.

Assignment PE4 Final Proposal Package

At the conclusion of each module, students will submit a package that synthesizes the most relevant information created over the course of the module and summarizing documentation memorializing the focus of the module.

ARC 501o

Module 1

Research

Assignment A 1.1

Digital Context Model

This assignment will be to complete, as a class section, a digital context model in Rhinoceros 3D format.

Deliverables

Each student will be responsible for the creation of their portion of the model, then the coordinate with other students to compile a single digital model using Rhinoceros into a single output

- Upload a link to download the Digital Context Model

Assignment A 1.2

City Context

This assignment will be to complete independent topical research and produce a summarizing document representing the work. This will be essential to building a better collective and individual understanding of the factors that should be considered in the development of your projects. A strong basis of understanding built in the beginning will contribute greatly to the decision making throughout the semester and ultimate success of your final projects.

Deliverables

Each student will be assigned and then asked to conduct independent topical research related to a specific subject, then generate:

- A single, consolidated 20-30 slide PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages) including diagrammatic mapping. Maximum 20 MB file size.
- Upload link to a 5-minute recording of yourself presenting the 20-30 slide PDF document. Please do not direct upload.

Assignment A 1.3

Research + Analysis

This assignment will ask students to conduct small group site analysis and research considering all possible factors and focused on the specific project area and its immediate surroundings. To begin, please review the all of the relevant research conducted studio-wide in 'Module 1.3 Research + Analysis' and demonstrate how those factors (in addition to any students discover independently) have influenced the history and culture of the site area and surrounding community.

Deliverables

Each student will be assigned and then asked to conduct independent topical research related to a specific subject, then generate:

- A single, consolidated 20-30 slide PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages) including diagrammatic mapping. Maximum 20 MB file size.
- Upload link to a 5-minute recording of yourself presenting the 20-30 slide PDF document. Please do not direct upload.

Assignment A 1.4

Precedent Analysis

The goal of the exercise is to conduct research and analysis of a precedent housing project and document the essential elements of what is discovered in the research.

Students will be assigned a local housing project or program and will be asked to analyze and document the ideas and elements essential to each

Deliverables

Each student will be assigned and then asked to conduct independent topical research related to a specific subject, then generate:

- A single, consolidated 10-15 slide PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages) including diagrammatic mapping. Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Project stats (year built, size, number of units + type, etc.)
- Written narrative consolidating key ideas discovered during research
- Key diagrams, concept drawings, and illustrations -- must be original drawings, drawn by the student completing the study
- Architectural drawings (site plan, floor plan(s), sections(s), elevations, etc.) -- must be original drawings, drawn by the student completing the study
- Project imagery
- Summary of key ideas and lessons extrapolated from the precedent project
- Two of the following:
- A traced overlay of a section highlighting the main ideas / concepts in the project
- A traced overlay of a floor or site plan highlighting the main ideas / concepts in the project
- A traced overlay of an axonometric / isometric diagram highlighting the main ideas in the project
- Upload link to a 5-minute recording of yourself presenting the 10-15 slide PDF document. Please do not direct upload.

Assignment A PE1

Research Package

This PE 1 Research Package assignment will ask students to present their research and demonstrate a clear perspective on the topic and context, which will form the basis for their conceptual design proposals. This assignment will ask students to assemble materials developed through the Module 1 assignments, in addition to independent findings discovered on their own, and conduct a 5 minute presentation of materials assembled in their Research Packages. This is intended to summarize the information you believe is most relevant to building your proposal and suggest a point of view.

Deliverables

- A single, consolidated 20-30 slide PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages) including the following information. Maximum 20 MB file size.
- Summary of Main Points Taken From Research Phase
- Process Work That Demonstrates the Evolution of Your Thinking to Date
- Summary of Primary Areas of Interest / Initial Ideas
- Supporting Research Conducted Throughout Module 1
- Isometric Mapping and Diagrams (with surrounding context)
- Site and surrounding context
- Key diagrams / information responding to contextual analysis and related Design Principles
- Additional diagramming specific to illustrating student proposal
- Upload link to a 5-minute recording of yourself presenting the 20-30 slide PDF document. Please do not direct upload.

Conservation & Heritage

Los Angeles



The Bradbury Building

INITIAL SUMMARY

TOPICS

SUB-TOPICS

Balancing Development with Heritage Conservation

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The Downtown LA core houses many historic structures and buildings that embodies the **history and culture of Los Angeles** and the many generations that have passed through it. They act as a time capsule holding the original soul of the city, and the preservation of them is culturally crucial, but it comes with challenges now in the future. One way to deal with them while still developing the city into today's needs is **adaptive re-use**, and ensuring that new builds follow the **specific guidelines and regulations** when it comes to working with historic districts.

In order to have a infill project succeed, an extensive community consultation is needed, to ensure that the future development plans are inline with the **social and cultural values** of the existing neighbourhoods. Preservation of cultural heritages go beyond the scope of buildings, and depends on the preservation of **community identity**. As new communities pop up, so do concern of gentrification, therefore balancing new and affordable housing is a necessity to preserve the soul of the community.

When designing for the future, we cannot disregard the past. New developements should be mindful of the existing **community identity and heritage**, and work to compliment them. This can and has been done through the use of materials, scale, and paying homage to the architectural style of the surrounding neighborhoods. The implementation of mixed-use buildings can bring create a more tight-knit community.

Moving into the present day and looking ahead towards the future of Los Angeles, the **integration of sustainable design** becomes crucial in urban infill projects, to ensure its long-term existence in downtown LA. It can be in the form of green roofs, using energy-efficient materials, all the down to how public-transit can be optimized. When preserving historical buildings, the economic aspects must also be considered. Bringing in **mixed-use spaces**, the community can generate its own income to afford all of the upkeep and costs that come with revitalization.

- The Bradbury Building

The Million Dollar Theater

Nishi Hogwanji Buddhist Temple

Spring Arcade Building

The Ace Hotel

The Wilshire Blvd Temple + Audrey Irmas Pavilion

The Row DTLA

Sixth Street Viaduct Bridge

Los Angeles, California

National Register of Historic Places



National Register of Historic Places Plaque

What is it?

*"The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the **National Historic Preservation Act of 1966**, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources."*

-NATIONAL PARK SERVICE (NPS.GOV)

The Mission

- Review nominations that Americans believe are worthy of preservation submitted by states, tribes, and other federal agencies and list eligible properties in the National Register
- Offer guidance on evaluating, documenting, and listing different types of historic places through the National Register Bulletin series and other publications
- Help qualified historic properties receive preservation benefits and incentives

-NATIONAL PARK SERVICE (NPS.GOV)

The Importance

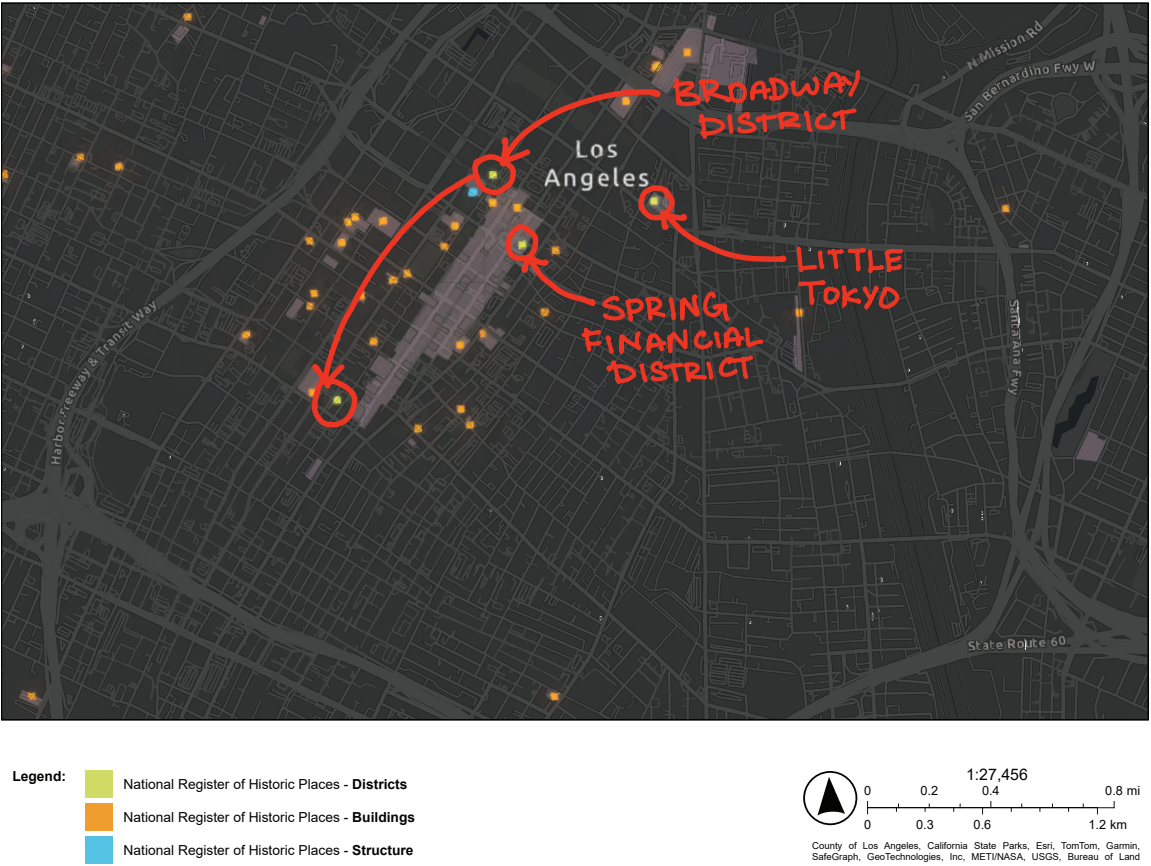
The National Register of Historic Places is crucial in the preservation of American history. It protects the historical and architectural aspect of the United States, and not only offers protection, but financial support to maintain and revitalize to significant locations.

With the preservations of these sites, Americans gain the opportunity to develop a understanding and appreciation of the countrys heritage and culture for generations to come.

References:

"What Is the National Register of Historic Places?" National Parks Service. Accessed September 1, 2024. <https://www.nps.gov/subjects/nationalregister/what-is-the-national-register.htm>.

Historic Districts Overlay Map



DTLA Historic Districts

Broadway Theatre District



Broadway Central Theatre District circa 1928 California Historical Society

DOWNTOWN THEATER RE-LEASED

Metropolitan Theaters, an operating chain, and 424 Broadway Ltd., a partnership, have negotiated a new, 25-year lease covering the Broadway Theater, 428 S. Broadway.

The theater has been leased and operated by Metropolitan, now marking its 50th anniversary, and it is one of the first to have been operated by the firm. The theater principally shows Mexican movies.

The new lease will represent approximately \$330,000 in consideration and includes about \$50,000 worth of improvements to the facility, according to Harold H. Starr and Mike Kamen, general partners of the owning entity.

1973 L.A. Times article

Historic Significance and Modern Development

The Broadway Theatre & Commercial District is a key historical area in Downtown Los Angeles. It showcases the city's culture in the early 20th century, and the prosperity of the entertainment industry and commercial growth. The district became a center for extravagant theatres and shopping centers. This caused a shift in certain areas, transforming areas south of third street, which originally was residential, into commercial. An example of this shift is seen in the introduction of a Hamburger's department store in 1905. With such developments in mind, **balancing growth** with **heritage conservation** has become vital to maintain the districts historical architecture intact.



Hamburger's Department Store Illustration

Adaptive Re-Use & "Bringing Back Broadway"

Since then, the Broadway Theatre and Commercial District has seen many new functions and utilizations. As development went on, the district began transitioning into a Latino shopping area, as well as transforming the upper stories of buildings in the area into modern loft-style apartments. **Adaptive reuse** has allowed these transitions to take place, while preserving the areas architectural and cultural history intact. Initiatives like "Bringing Back Broadway", Los Angeles Conservancy and **NRHP** have ensured that new developments do not harm the district's cultural and historical significance.

Economic and Cultural Impact

The district's revitalization has aided in stimulating economic growth while preserving its historic significance. As development goes on, it is evident that the preservation and use of historic theatres and buildings continue to be respected and held at priority, and are used as special-event venues and retail, which bring **economic growth**, therefore creating more financial support, not only in the efforts of preservation, but to the surrounding community.

References:

Counter, Bill. "Broadway Theatre." Broadway Theatre. Accessed September 1, 2024. <https://losangelestheatres.blogspot.com/2019/01/broadway-theatre.html>.
"California: Broadway Theater and Commercial District (U.S. National Park Service)." National Parks Service. Accessed September 1, 2024. <https://www.nps.gov/places/broadway-theater-and-commercial-district.htm>.

1918
Broadway Theatre District



Million Dollar Theatre



2024

References:

Matt. (2018, February 5). Los Angeles Theatre Exteriors. After the Final Curtain. <https://afterthefinalcurtain.net/2018/02/02/los-angeles-theatre-exterior/>
Counter, B. (n.d.). Million dollar theatre: Vintage exterior views. Million Dollar Theatre: vintage exterior views. <https://losangelestheatres.blogspot.com/2018/02/million-dollar-vintage-exterior-views.html>

DTLA Historic Districts

Little Tokyo Historic District

Historic Significance and Modern Development

Little Tokyo in downtown Los Angeles is a significant component in the Japanese-American history. It is one of three official "Japan Towns" in the United States. It represents a culturally rich history that spans over a century. It has been a center for Japanese-Americans since the early 20th century. It preserves the Japanese businesses, cultural institutions, and religious

sites. It also reminds us of a dark part of our history involving what the United States did to the Japanese living in California during WWII. Little Tokyo is more than a physical location. It is a symbol of cultural resilience and identity. Due to its location and proximity to Downtown Los Angeles and the Arts District, Little Tokyo is constantly under the microscope of developers.



House of Culture in Little Tokyo circa 1950s

Toyo Miyatake



East First Street in an undated photo



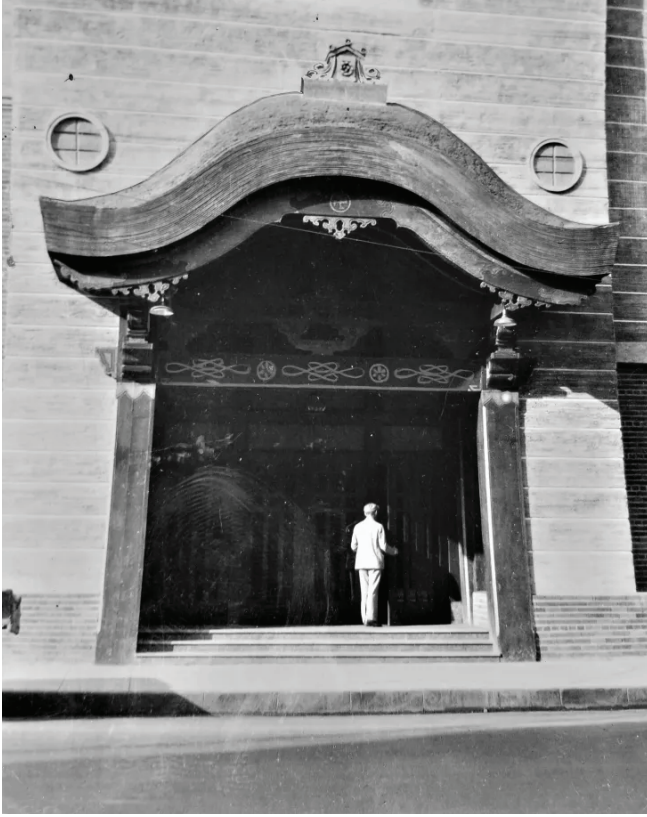
1st Street, Apr 1942

Russell Lee

References:

Pearson, B. (2020, July 1). After internment, a store was born. It's still an L.A. Staple. The New York Times. <https://www.nytimes.com/2020/07/01/magazine/little-tokyo-bunkado-los-angeles-japanese.html>
 City of La Profile. Home | Los Angeles City Planning. (n.d.). <https://planning.lacity.gov/>
 American Legal Publishing, Official City of Los Angeles municipal code. Cincinnati, OH.
 Home. LA Conservancy. (2024, August 26). <https://www.laconservancy.org/>
 Contributor, R. (2023, December 20). Bronzeville: The Rise and Fall of Little Tokyo's Black Community. Rafu Shimpō. <https://rafu.com/2023/03/bronzeville-the-rise-and-fall-of-little-tokyos-black-community/>

1927
Little Tokyo



Nishi Hongwanji Buddhist Temple (JANM)



2024

References:

Homesteadmuseum. (2024, June 5). Take it on faith: A press photo of Nishi Hongwanji Buddhist Temple, little Tokyo, Los Angeles, 1927. The Homestead Blog. <https://homesteadmuseum.blog/2018/07/15/take-it-on-faith-a-press-photo-of-nishi-hongwanji-buddhist-temple-little-tokyo-los-angeles-1927/>
Homba Hongwanji Buddhist temple historical marker. Historical Marker. (2023, October 16). <https://www.hmdb.org/m.asp?m=231223>

DTLA Historic Districts

Spring Street Financial District

Historic Significance

The Spring Street Financial District was the heart of Los Angeles' financial and commercial activities from the late 19th-century to the mid 20th-century. It was once referred to as the "Wall Street of Los Angeles". It boasts many Beaux-Arts, Art Deco and Neoclassical buildings. It once housed banks, investment firms, and corporate headquarters. The Spring Street Financial district

symbolizes the economic boom of Los Angeles during that period of time in history.



Spring Street used in filming 1923 silent film "Safety Last!"



Ralphs Bros. Grocery and New York Bakery - Sixth and Spring Street

Unknown



1904 Panorama including the 600 Block of Spring St.

Pierce, C.C. 1861-1946

References:

Cinemaburn. (2013, June 14). Safety last!. cinemaburn. <https://cinemaburn.wordpress.com/2013/06/19/safety-last/>
University of Southern California. (n.d.). <https://digitallibrary.usc.edu/>

References:

Meares, H. (2019a, January 31). 13 then-and-now photos of downtown La. Curbed LA. <https://la.curbed.com/2017/11/30/16697744/downtown-los-angeles-historic-photos>

Retail Space
House a variety of retail shops and boutiques, attracting shoppers with its unique architecture and ambiance.

Office Space
The towers on either end were used for professional offices, catering to businesses that desired a prime location in downtown LA.

Commercial Hub
It was envisioned as a bustling commercial center where people could shop, dine, and conduct business, similar to European shopping arcades like the Galleria Vittorio Emanuele II in Milan.

1924
Spring Street Financial District



Spring Financial District

2024

Residential Lofts
The upper floors of the building have been converted into residential lofts, attracting tenants interested in urban living with historical charm.

Food and Retail Spaces
The arcade now hosts a variety of food vendors, cafes, and unique retail shops, becoming a popular destination for both locals and tourists.

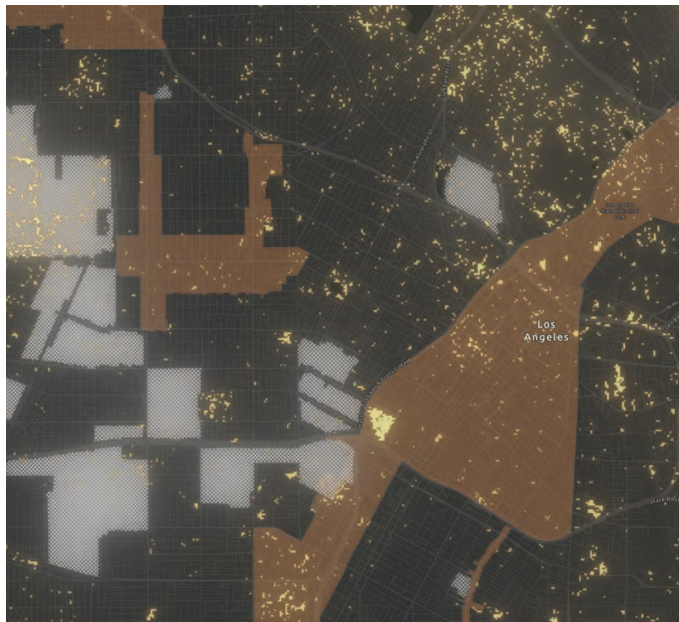
Event Space
The building's unique architecture and ambiance make it an attractive venue for events, pop-up markets, and art shows.

Creative Offices
Some spaces within the building are still used for offices, often by creative businesses, startups, and tech companies.

The Spring Arcade Building

Balancing Development With Heritage

Map Overlay of DTLA



Legend:

- New Development Zones
- HPOZ (Heritage Protection Zones)
- Adaptive Reuse Incentive Zone

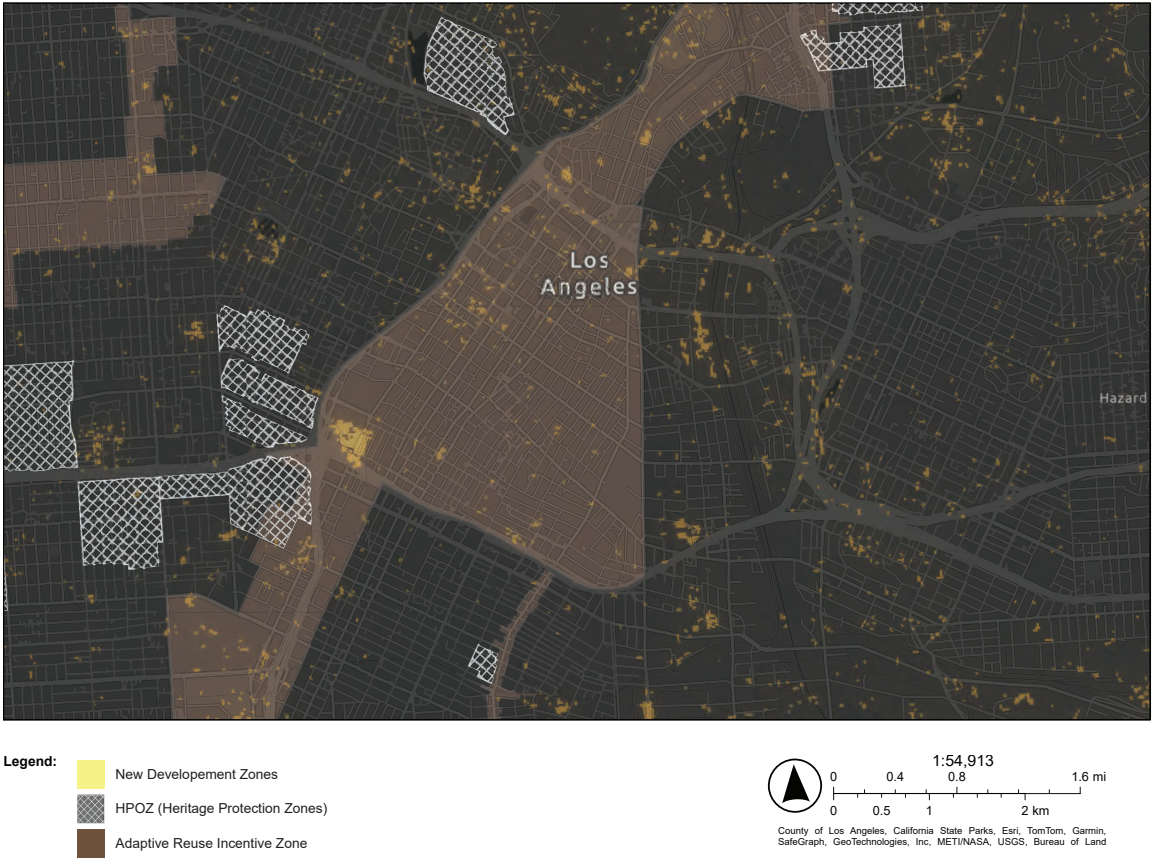
References:

City of La Profile. Home | Los Angeles City Planning. (n.d.). <https://planning.lacity.gov/>
American Legal Publishing. Official City of Los Angeles municipal code. Cincinnati, OH.
Home. LA Conservancy. (2024, August 26). <https://www.laconservancy.org/>

Zoning By-Laws & Legal Protection

- HPOZ (History Preservation Overlay Zone)**
 - Any new development must be reviewed and approved by the Preservation Board or a city planning commission to ensure that whatever is proposed is in line with the historical context.
- Adaptive Reuse Ordinance**
 - Allows for conversion of older buildings into new uses
 - Encourages developers to keep existing structures while adding new functions
 - Provides financial incentives for Adaptive Reuse projects
- New Development Zones**
 - DTLA has seen a spike in new developments
 - The yellow spots on the map showcases the hotspots for urban infill and mixed use developments.
 - The proximity of these new developments to historic sites or HPOZ's, rely on a careful balance.

Downtown LA Zoning Overlay Map



Cultural Heritage + Community Identity

Cultural Heritage, Community Identity and Urban Development



Correlations

Cultural Heritage + Community Identity

Cultural heritage affects **Community Identity** directly. Places like downtown Los Angeles have iconic historic sites that contribute to the character of the neighborhoods. Preserved heritage also strengthens community pride and provides a shared history for residents.

Cultural Heritage + Urban Development

Thoughtful **urban development** can support **heritage preservation** by integrating historic sites into new projects through adaptive reuse or contextual design. Developers can enhance the value of their projects by integrating these historic aspects.

Community Identity + Urban Development

Sustainable **Urban Development** should aim to respect and enhance the **Identity** of the existing communities rather than displace them. Projects that involve locals and addresses their needs can lead to a growth that is both inclusive and respectful to local culture.

Community Identity + Urban Development + Cultural Heritage

The ideal balance where development respects and enhances both the historical significance of the area and the needs of the local community. This might involve integrating new infrastructure into the existing historical fabric, promoting inclusive growth, and ensuring that local culture remains visible and is valued. An example of this can be seen in the adaptive reuse of **The Ace Hotel**, which preserved the United Artists Theatre, while converting the building into a luxury hotel, supporting both heritage preservation and economic revitalization.

Throughout The Years
California Petroleum Corp.
Texaco Building
United Artists Theatre
University Cathedral
The Ace Hotel

1927
California Petroleum Corp. Building



STILE Downtown Los Angeles by Kasa

2024

Current Occupation
STILE Downtown Los Angeles by Kasa
Amenities
Bars : Three
Restaurant
Pool
Restored Theatre (The United Theatre on Broadway)

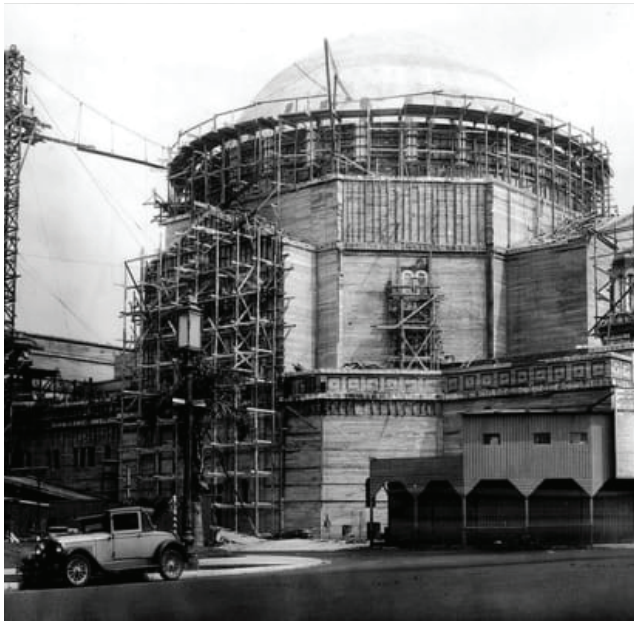
References:

Fracalossi, I. (2014, May 5). Ace Hotel Downtown LA / commune design. ArchDaily. <https://www.archdaily.com/502646/ace-hotel-downtown-la-commune-design>
Grec Studio: Ace Hotel Los Angeles. GREC Architects. (n.d.). <https://www.grecstudio.com/projects/ace-hotel-la/#proInspirationScroll>

The Ace Hotel

Case Study

Wilshire Boulevard Temple



Wilshire Boulevard Temple Construction circa 1920's

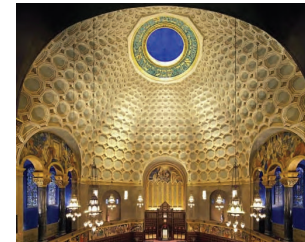
Unknown

Significance

Located in Koreatown, this historic Jewish synagogue was built in 1929, and it is one of the most architecturally significant religious structures in Los Angeles. The recent addition of the Audrey Irmas Pavillion designed by OMA, exemplifies a balanced approach to heritage preservation, community engagement and modern development.

Cultural Heritage

The original synagogue is an important cultural and religious landmark. It has been listed on the National Register of Historic Places. It pulls inspiration from the Byzantine Era, with its stained glass windows, and iconic dome which represents Jewish heritage.



Inside the Temple

Community Identity

The temple serves not only as a religious hub, but also as a cultural one. It brings together the local Jewish community and surrounding neighborhoods. The new pavilions design reflects the temples objective of continuing its role as a center for community activities, such as religious services and educational programs. The temple is located in Koreatown, which is one of the most diverse neighborhoods in Los Angeles. The **Audrey Irmas Pavillion** was designed to reflect the changing dynamics of the neighborhood, with the Pavillion offering various spaces for cultural gatherings and community activities, serving people of all denominations and cultures.

References:

Mayer Rus, J. O. (2021, September 9). OMA expands the Wilshire Boulevard Temple in Los Angeles with a striking New Pavilion. Architectural Digest. <https://www.architecturaldigest.com/story/oma-expands-the-wilshire-boulevard-temple-in-los-angeles-with-a-striking-new-pavilion>
History. Wilshire Boulevard Temple. (n.d.). <https://www.wbtla.org/about/history>

1929 *Wilshire Boulevard Temple*



The Wilshire Boulevard Temple + Audrey Irmas Pavilion

Wilshire Blvd Temple + Audrey Irmas Pavilion 2024

References:

Mayer Rus, J. O. (2021, September 9). OMA expands the Wilshire Boulevard Temple in Los Angeles with a striking New Pavilion. Architectural Digest. <https://www.architecturaldigest.com/story/oma-expands-the-wilshire-boulevard-temple-in-los-angeles-with-a-striking-new-pavilion>
History. Wilshire Boulevard Temple. (n.d.). <https://www.wbtla.org/about/history>

Sustainability and Long Term Viability



Santa Fe Freight yard converted into new SCI-Arc campus

Sustainability in Heritage Conservation

Reducing Environmental Impact

The demolition of buildings creates a significant waste and requires energy-intensive processes. Through strategies like adaptive reuse, we can reduce demolition waste, conserve resources and limit our carbon footprint associated with new construction.

Energy Efficiency

Many historic buildings can be retrofitted with modern, energy efficient systems. These systems are installed without compromising the historical integrity of the structures. By upgrading insulation, heating and cooling systems, and windows, these historic buildings can meet sustainability standards, while maintaining their original character.

Sustainable Urban Growth

When we preserve and reuse existing structures, we contribute to sustainable urban growth. Its direct impact on it is due to the fact that instead of tearing down and expanding outwards, we can focus on maintaining and enhancing what is already there, which leads to a more efficient use of land and infrastructure.

References:

Adaptive reuse ordinance: 20 years of preservation in Downtown Los Angeles. LA Conservancy. (2023, September 26). <https://www.laconservancy.org/blog/adaptive-reuse-ordinance-20-years-of-preservation-in-downtown-los-angeles/>
Sharp, S. (2020, March 24). First look at row DTLA. Urbanize LA. <https://la.urbanize.city/post/first-look-row-dtla>
ARC building history spans decades as well as neighborhoods of Los Angeles - sci-arc. SCI. (n.d.). <https://www.sciarc.edu/news/2022/sci-arc-building-history-spans-decades-as-well-as-neighborhoods-of-los-angeles>

Sustainability and Long Term Viability



Bradbury Building, LA - Converted into office and retail spaces

Long Term Viability

Adaptive Reuse

Repurposing historic buildings for modern uses (offices, apartments, etc.), will help preserve character while meeting market demands.

Heritage Tourism

Leveraging cultural heritage to attract tourists and generate revenue through tours, fees, and local businesses. (Like seen in the example of the Broadway Theatre District)

Tax Incentives and Grants

Utilizing financial incentives like federal tax credits and local grants to offset restoration costs.

Increased Property Value

Historic districts tend to see higher property values due to their sophisticated and unique architecture, and rich culture.

References:

Rypkema, D. (2005). "The Economics of Historic Preservation: A Community Leader's Guide." National Trust for Historic Preservation Home. LA Conservancy. (2024, September 5). <https://www.laconservancy.org/>
Leichenko, R. M., Coulson, N. E., & Listokin, D. (2001). "Historic Preservation and Residential Property Values: An Analysis of Texas Cities." Urban Studies, 38(11)

Original Use
Southern Pacific
Railroad Terminal

Originally, this structure served as the LA Terminal Market. It was a major hub for produce distribution in DTLA.

Fun Fact

The original structure is seen in the first car meet scene in Fast and Furious.

1920's *Southern Pacific Railroad Terminal*



The Row DTLA



Row DTLA
2016

Parking

A 10-story parking garage for 5000-car parking.

Food and Retail Spaces

200,000 sqft of ground-floor commercial space and an eclectic mix of restaurants. Retail spaces for luxury brands.

Event Spaces

Over 30,000 sqft of art display space, and 20,000 sqft of event space.

References:

Sharp, S. (2020a, March 24). First look at row DTLA. Urbanize LA. <https://la.urbanize.city/post/first-look-row-dtla>
Row DTLA | architect magazine. (n.d.). <https://www.architectmagazine.com/project-gallery/row-dtla>

Design Integration and Aesthetics

Contextual Design



New Sixth Street Viaduct is reminiscent of its predecessors arches and form.

Incorporation of Historic Elements

New infill developments must be designed with sensitivity to the existing urban fabric.

Strategies

- Matching Materials
- Scale
- Reflection of surrounding architectural styles
- History

Case Study

Sixth Street Viaduct

Due to structural concerns with the old Sixth Street Bridge, demolition became necessary. Architect Michael Maltzan was commissioned to design the new bridge, creating a structure that pays homage to its predecessor. While incorporating modern elements, the new design echoes the original with its signature arches and overall aesthetic, blending respect for the past with a contemporary update. Though the old bridge was removed, the replacement honors its legacy, ensuring its spirit remains a lasting part of Los Angeles' history.

References:

Sixth street viaduct replacement project. Sixth Street Viaduct Replacement Project | Bureau of Engineering. (n.d.). <https://engineering.lacity.gov/about-us/major-projects/sixth-street-viaduct-replacement-project>

In Conclusion

Building Development with Heritage Conservation

The **cultural heritage** of downtown Los Angeles, reflected in its historic districts and iconic structures, is essential for preserving the city's identity. However, balancing **development and conservation** poses challenges as the city continues to grow. Utilizing adaptive reuse allows modern needs to be met while maintaining historical integrity. Following **preservation regulations and guidelines** is crucial to protecting these areas during redevelopment. This approach promotes **sustainability and economic growth**, fostering a vibrant urban environment where history and innovation coexist, providing a model for **the future of urban growth**.

Cultural Heritage + Community Identity

Urban infill and mixed-use housing projects in Downtown LA, such as the Ace Hotel and the Wilshire Boulevard Temple with the Audrey Irmas Pavilion, highlight the vital role of community engagement in successful development. These projects illustrate that preserving cultural heritage is not just about protecting buildings but also about safeguarding the community's identity. To mitigate the risks of gentrification, it is essential that new developments incorporate affordable housing and respect the neighborhood's social fabric, ensuring the community's essence remains intact. Key takeaways include the **importance of community consultation** to align development with cultural and social values, the need for a **broader approach to cultural heritage preservation**, and the necessity of **balancing growth with affordability** to protect the community's character, which is fundamental to sustainable urban development.

Sustainability and Long Term Viability

As Los Angeles moves into the future, the **integration of sustainable design** in urban infill projects is essential for ensuring the city's long-term viability. This can involve incorporating green roofs, using energy-efficient materials, and optimizing public transit systems to reduce the environmental footprint. Additionally, **economic sustainability** must be a priority when preserving historical buildings. By developing **mixed-use spaces**, communities can generate their own income to cover the costs of upkeep and revitalization, supporting both the preservation of historical character and sustainable urban growth.

Design Integration and Aesthetics

When designing for the future, it is crucial to **honor existing community identity and heritage**. New developments should complement the surrounding environment through thoughtful choices in materials, scale, and architectural style. By **paying homage to the past**, these projects can blend seamlessly with their neighborhoods. Additionally, the **implementation of mixed-use buildings** can help foster a more tight-knit community, creating spaces that encourage social interaction and economic vitality while respecting the area's cultural context.

Case Studies and Precedents

- The Ace Hotel
- The Million Dollar Theater
- The Bradbury Building
- Nishi Hogwanji Buddhist Temple
- Spring Arcade Building
- The Wilshire Blvd Temple + Audrey Irmas Pavilion
- The Row DTLA
- Sixth Street Viaduct Bridge

Los Angeles, California

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"What Is the National Register of Historic Places?" National Parks Service. Accessed September 1, 2024. <https://www.nps.gov/subjects/nationalregister/what-is-the-national-register.htm>.

Preservation of Historic Structures



The new viaduct is reminiscent of its predecessors' arches and form.

Adaptive Reuse

- Exploring new ways to repurpose existing structures
- An example for our site could be the conversion of old factories and warehouses into mixed-use residential and commercial spaces

Incorporation of Historic Elements

- Integrating preserved facades
- Matching new materials to surrounding context
- Design elements that pull together the existing culture and language

Challenges of Preservation

- Challenge of maintaining existing structure
- Meeting modern building codes
- In compliance to new safety standards
- Accessibility

References:

Sixth street viaduct replacement project. Sixth Street Viaduct Replacement Project. Bureau of Engineering. (n.d.). <https://engineering.lacity.gov/about-us/major-projects/sixth-street-viaduct-replacement-project>

OLD
Santa Fe Freight Yard



NEW
SCI-Arc

Southern California's Institute of Architecture refurbished an old Freight yard into a modern campus, while reutilizing the existing structures.

References:

ARC building history spans decades as well as neighborhoods of Los Angeles - sci-arc. SCI. (n.d.). <https://www.sciarc.edu/news/2022/sci-arc-building-history-spans-decades-as-well-as-neighborhoods-of-los-angeles>

Cultural Heritage & Community Identity



Mariachi band performing in Boyle Heights

Respect for Cultural Landmarks

- Ensuring that new developments respect culturally significant sites important to local community

Community Involvement

- Engaging with cultural organizations and local residents
- Discussing redevelopment plans to see if they are in line with the community's vision

Case Study

Boyle Heights

- Located in Boyle Heights
- Mariachi Bands have gathered here since the 1930s
- A Hub for music, social gatherings and cultural events

Considerations for Redevelopment

- Redevelopment should be sensitive to its cultural significance and use
- A public space for gathering
- Maintain its architectural style and public art



Ice cream shop in Boyle Heights



Traditional Latino murals in Boyle Heights

References:

November 1, 2020. Betty Mar. Comments. (n.d.). The sounds of California in Boyle Heights, Los Angeles. Smithsonian Center for Folklife and Cultural Heritage. <https://folklife.si.edu/magazine/sounds-of-california-boyle-heights-los-angeles>
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Affordable Housing and Gentrification Concerns



The Lorena Project, an affordable housing development currently underway

References:

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Affordable Housing Integration

- New developments should consider including affordable housing options to prevent displacement of the long-term residents of the area

Resources

Affordable Housing Development Projects

- Addresses housing needs while ensuring such projects as **The Lorena Project** , are sensitive to local cultural and historical concerns
- Ensuring community input and transparency in the planning process

Community Land Trusts CLTs

- Created by the **East Los Angeles Community Corporation (ELACC)**
- A Non-Profit organization
- Acquires and Manages land to provide affordable housing and prevent displacement by retaining ownership of the land
- Provides affordability for future generations
- Secures long term affordability against gentrification

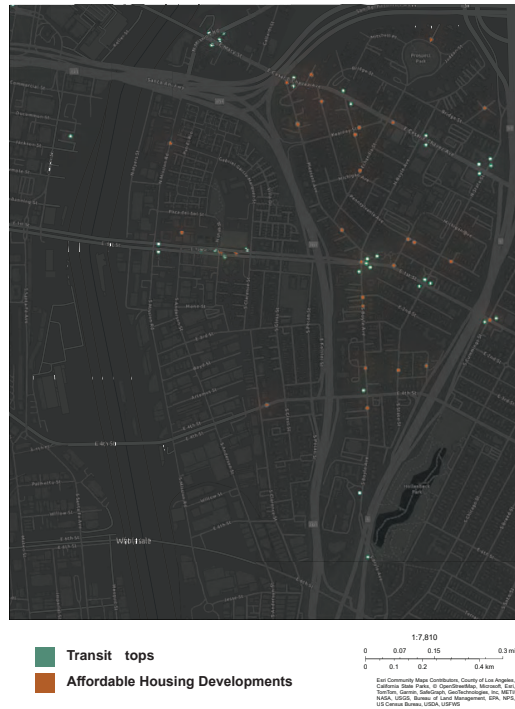
Equitable Development

- a community-centered approach to planning and growth that ensures all residents, especially marginalized groups, benefit fairly from economic, social, and environmental improvements.

Tenant Protections and Rent Control

- Community groups in Boyle Heights advocate for stronger tenant protections to address gentrification, including:
 - Expanding rent control.
 - Implementing just-cause eviction laws.
 - Los Angeles has enacted policies to prevent displacement, such as:
 - **Rent Stabilization Ordinance (RSO)** : Limits rent increases for certain older housing stock.
- Strengthen rent control.
- Enforce just-cause eviction ordinances.
- Provide rental assistance programs.
- Ensure new developments comply with these regulations to prevent displacement.

Zoning and MATCH



Inclusionary Zoning Policies

Affordable Housing Linkage Fee

- Developers pay a fee based on the size and type of the project.
- The fee supports the development of affordable housing projects throughout the city.

Mandatory Affordable Housing Program

- Re uires new residential projects to include a percentage of affordable units.
- The percentage varies depending on the project s si e and location.

ensit onus rogram

- Allows developers to build more units than normally permitted if they include affordable housing.
- Provides incentives such as increased height limits or reduced parking requirements.

Transit Oriente Communities TOC rogram

- Developers pay a fee based on the size and type of the project.
- The fee supports the development of affordable housing projects throughout the city.

Affordable Housing Incentive Program (AHIP)

- Offers additional incentives for projects that exceed the minimum affordable housing requirements.
- Can include benefits such as reduced fees or expedited permit processing.

Metro Affordable Transit Connected Housing (MATCH)

MATCH is a financing program designed to support the development and preservation of affordable housing near public transit stations in Los Angeles.

- Expands the availability of affordable housing in proximity to transit, making it easier for low-income families to access public transportation
- Residents save on commuting expenses by living near transit.
- Helps stabilize neighborhoods by preserving existing affordable housing and supporting new developments.
- Encourages living in transit-accessible areas, which lowers the need for car travel and decreases overall emissions.
- Promotes transit-oriented development, which supports more sustainable urban growth.
- Helps protect existing low-income residents from being displaced due to rising rents and gentrification.
- Aligns with LA Metro's broader initiative to ensure that low-income transit riders can continue to live close to frequent and accessible public transportation.

References:

Affordable Housing Linkage Fee Background. LAHD. (n.d.-a). <https://housing2.lacity.org/policy-data/affordable-housing-linkage-fee-background>

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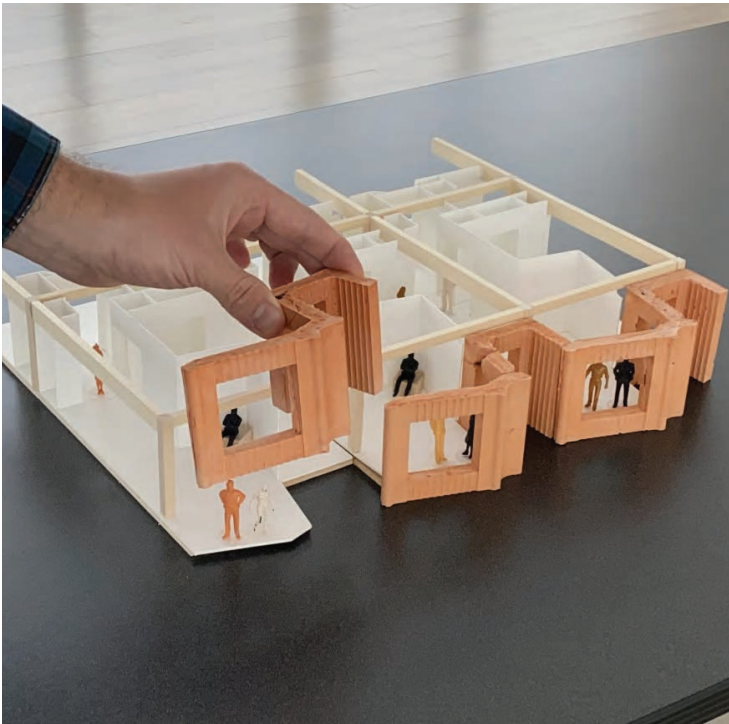
Assemble Chicago *Chicago, IL*



Render of the Proposed "Assemble Chicago" Building

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Physical Model of Units

MODULE 1.4

Introduction



Year Proposed: 2020
Location: Lakeside, Downtown Chicago, IL, USA
Size: 250,000 SQFT
Units: 207 Affordable Housing Units
Architects: Studio Gang x TCB (The Community Builders)

- Mixed-use development (residential, commercial, community spaces)
- Focus on affordable housing in a high-demand urban area
- Net-zero energy building with sustainable design elements

- Addresses Chicago's housing crisis in a central location
- Exemplifies sustainable urban living, integrating public amenities and community-building

"What Is the National Register of Historic Places?" National Parks Service. Accessed September 1, 2024. <https://www.nps.gov/subjects/nationalregister/what-is-the-national-register.htm>.

Introduction



Render of the new proposed park hub

References:

Assemble chicago – designbridge. (n.d.-a). <https://designbridgetld.com/assemble-chicago/>

Project Overview

- "Assemble Chicago" by Studio Gang is an affordable housing project in downtown Chicago. Targets low- to moderate-income residents, offering diverse housing options.
- Aims to combine sustainability, affordability, and community-focused design.
- Designed as a **net-zero energy** building, promoting sustainable urban living.
- Addresses the need for **affordable housing** in Chicago's urban core.
- Integrates mixed-use spaces with residential units, commercial areas, and community spaces.
- Promotes social interaction through communal lounges, retail spaces, and outdoor green areas.
- Enhances both the residents' living experience and the **surrounding urban environment**.
- A key example of **modern urban infill**, contributing to community and environmental goals.

Location



Site Context Diagram

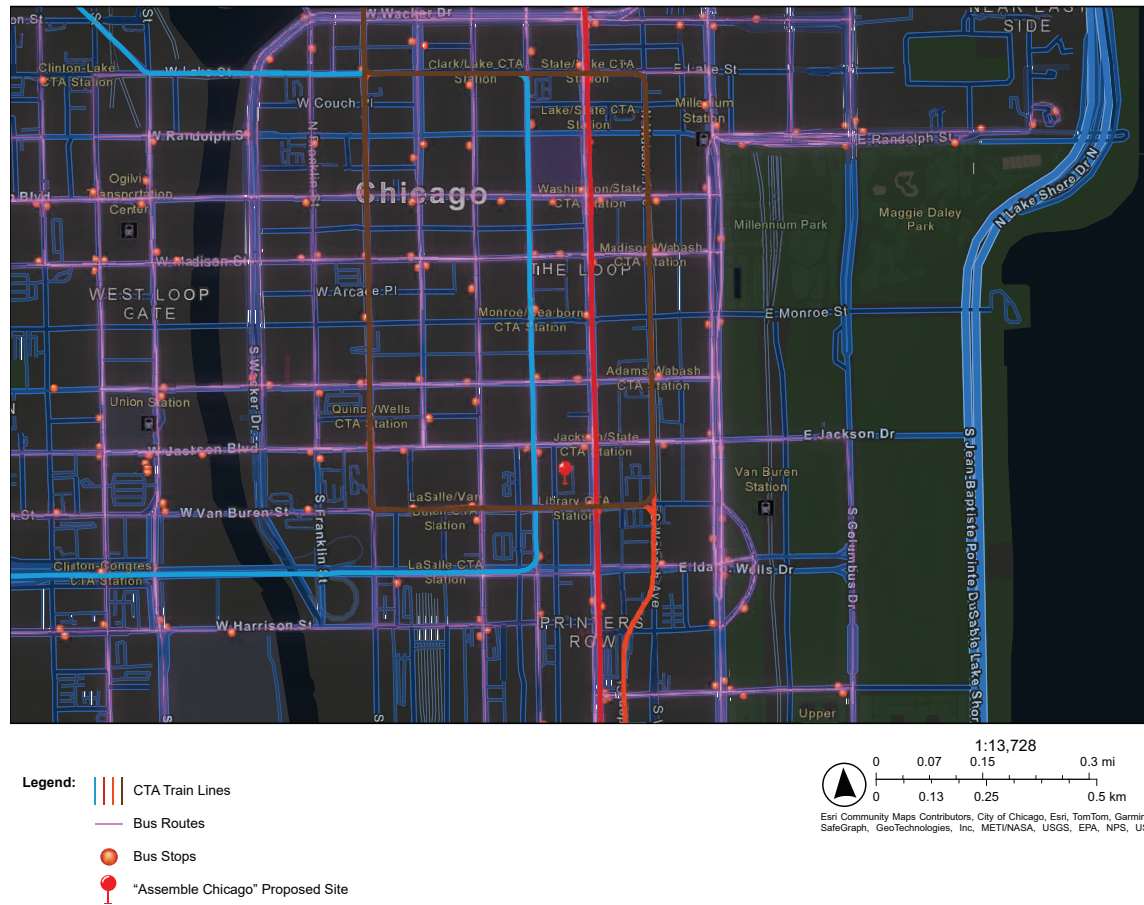
References:

Assemble chicago – designbridge. (n.d.). <https://designbridgetld.com/assemble-chicago/>

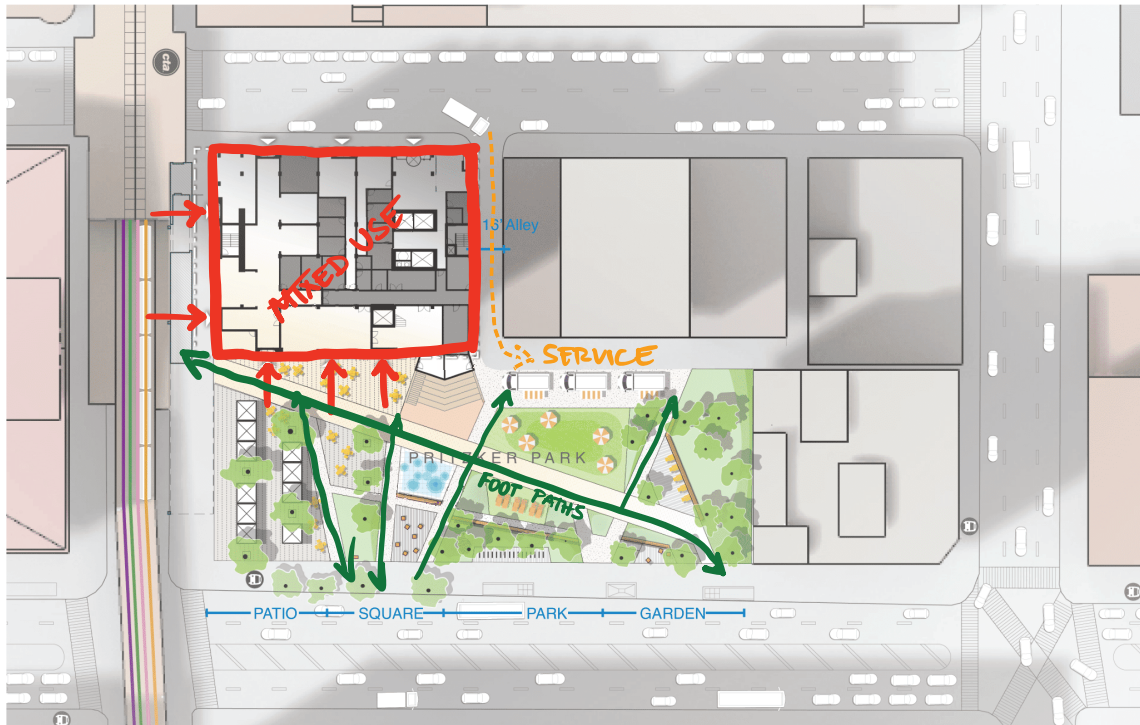
Urban Context

- Located in downtown Chicago, "Assemble Chicago" integrates into a dense urban fabric.
- Positioned near major transportation hubs, including public transit and bike routes.
- Surrounded by key amenities such as parks, schools, shopping centers, and cultural institutions.
- Contributes to the revitalization of the surrounding area through urban infill development.
- Designed to enhance walkability, encouraging pedestrian engagement with nearby services and spaces.
- Acts as a catalyst for social and economic activity, supporting local businesses and community services.
- Reflects Studio Gang's commitment to creating projects that foster urban connectivity and sustainability.

Chicago Transit Map



Site Plan



Site Context Diagram

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
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Location & Accessibility:

It's right in the heart of downtown near Lakeside, which makes it super accessible to public transit, job hubs, and public spaces. This is key for affordable housing because residents can easily get around without relying on cars. The location is also a big deal for creating community ties, given that it's a mixed-use development. Positioned near major transportation hubs, including public transit and bike routes.

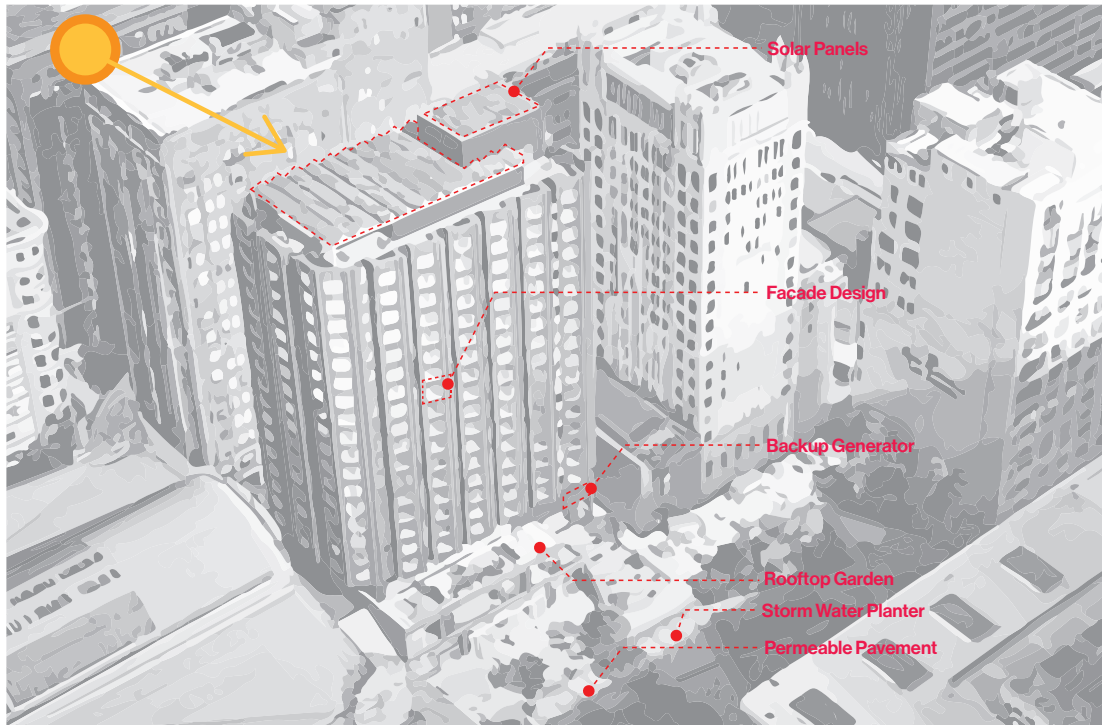
Pedestrian-Friendly:

The ground level is designed with a lot of thought for pedestrians. It's got wide sidewalks, retail shops, and community spaces that encourage foot traffic and make it a welcoming area. This is important in a dense urban space like Chicago, where making streets lively and walkable can help connect people to the city.

Community Spaces:

The site plan integrates public and communal spaces that allow residents to connect and engage. These spaces are designed to foster interaction, with open courtyards and common areas that make the building feel more like a community rather than just a place to live.

Sustainability



Sustainability Diagram

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
Bacap. (2021, September 29). Assemble chicago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chicago-envisioning-a-net-zero-apartment-buildingin-chicagos-loop/>

Solar Panels

The rooftop of Assemble Chicago is fitted with solar panels, which play a significant role in the building's goal to achieve net-zero energy. These panels generate renewable energy that powers much of the building's operations, reducing its reliance on non-renewable energy sources. This sustainable energy approach contributes directly to reducing the building's overall carbon footprint.

Facade Design

The building's facade is carefully designed to be both aesthetically pleasing and energy-efficient. With a 25% window-to-wall ratio, the facade limits heat loss, improves thermal efficiency, and maximizes daylight while reducing the need for artificial lighting. This design approach lowers overall energy consumption, supporting the project's sustainable goals.

Rooftop Garden

The rooftop garden serves multiple purposes. Beyond providing a green, relaxing space for residents, it helps to reduce the urban heat island effect and manage stormwater. The garden also enhances biodiversity in the city and improves air quality, contributing to the building's environmental goals.

Storm Water Planters

The building incorporates stormwater planters that help manage rainwater runoff. These planters collect and filter rainwater, reducing strain on the city's drainage systems and minimizing the risk of flooding. They also add greenery to the building's exterior, contributing to its eco-friendly and aesthetic appeal.

Permeable Pavers

Assemble Chicago uses permeable pavers in exterior areas, such as pathways and courtyards. These pavers allow rainwater to seep into the ground, reducing runoff and promoting natural water filtration. This not only helps manage stormwater but also supports the building's broader sustainability efforts by mitigating urban flooding risks.

Programming



(SEMI-PRIVATE)
MIXED-USE

(PRIVATE)
RESIDENTIAL

(PUBLIC)
• CLASSROOMS
• RETAIL
• FOOD HALL
• OUTDOOR SPACE
• FLEX SPACE

Programming Overlay

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
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Mixed Use Layouts

o PRIVATE o SERVICE o SEMI-PRIVATE o VERTICAL CIRCULATION



L1 - Ground Floor

The ground floor is designed for high interaction with the surrounding urban environment. It includes retail spaces that engage the public and create a pedestrian-friendly atmosphere. This commercial frontage supports community activity while ensuring the development blends into the fabric of downtown Chicago. L1 also serves as the primary entrance for residents, with a welcoming lobby that connects to the communal areas, setting the tone for the building's social and inclusive design.



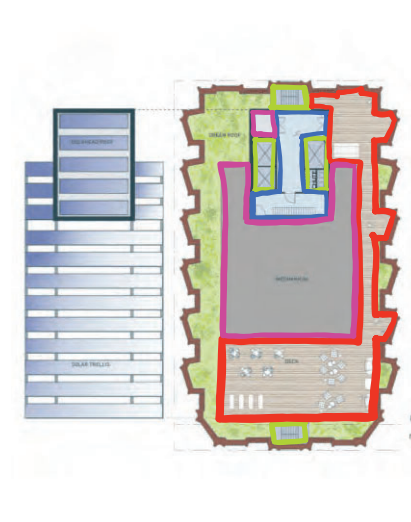
L2 - Shared Amenities & Community Spaces

The second floor focuses on resident-oriented amenities. Here, you'll find communal lounges and shared spaces aimed at fostering interaction and building a sense of community. These areas are designed to be flexible, serving multiple functions from social events to co-working spaces. The communal areas are connected to outdoor terraces, extending the living space and providing residents with access to fresh air and relaxation.



L3 - Residential Focus with Communal Connection

The third floor marks the transition to primarily residential spaces, but still maintains easy access to shared areas. On L3, residents have direct access to some of the building's open-air terraces. The design encourages interaction between neighbors while still offering privacy and personal space within each unit. This floor exemplifies how the project balances private and public spaces.



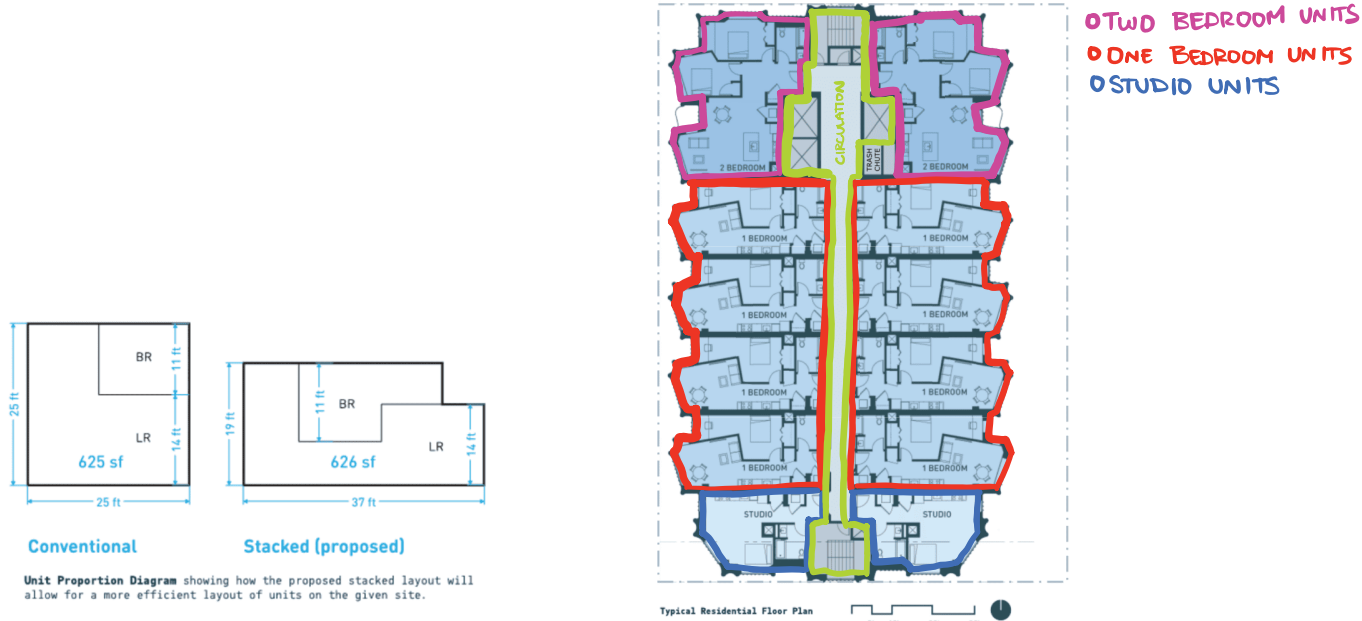
Rooftop - Green and Social Space

The rooftop of Assemble Chicago is a key feature of the building's sustainability and community strategy. The rooftop includes a green roof that helps manage stormwater and reduce the building's overall energy consumption. It also features open spaces for residents to enjoy, providing panoramic views of downtown Chicago. This area is designed to be both a relaxing retreat and a place for social gatherings, combining the best of green design and community interaction.

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
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Residential Floor Layouts



Variety of Unit Types

The residential floors include a variety of units ranging from studios to multi-bedroom apartments, making the development accessible to a diverse group of residents. Each unit is optimized for space efficiency, with layouts that maximize livable areas without wasting square footage. Even in smaller units like studios, the design ensures comfortable living with clearly defined spaces for sleeping, dining, and working

Energy Efficiency & Natural Light

All units are designed with sustainability in mind. The 25% window-to-wall ratio continues across all floors, allowing ample natural light into each apartment while minimizing heat loss. This strategic placement reduces the need for artificial lighting and cooling, which helps the building meet its net-zero energy goals

Inclusive & Accessible Design

The design of the residential floors ensures accessibility for all residents. Some units are specifically designed to be ADA-compliant, making the building inclusive for individuals with disabilities. The layouts are adaptable and flexible, allowing residents to personalize their spaces as needed

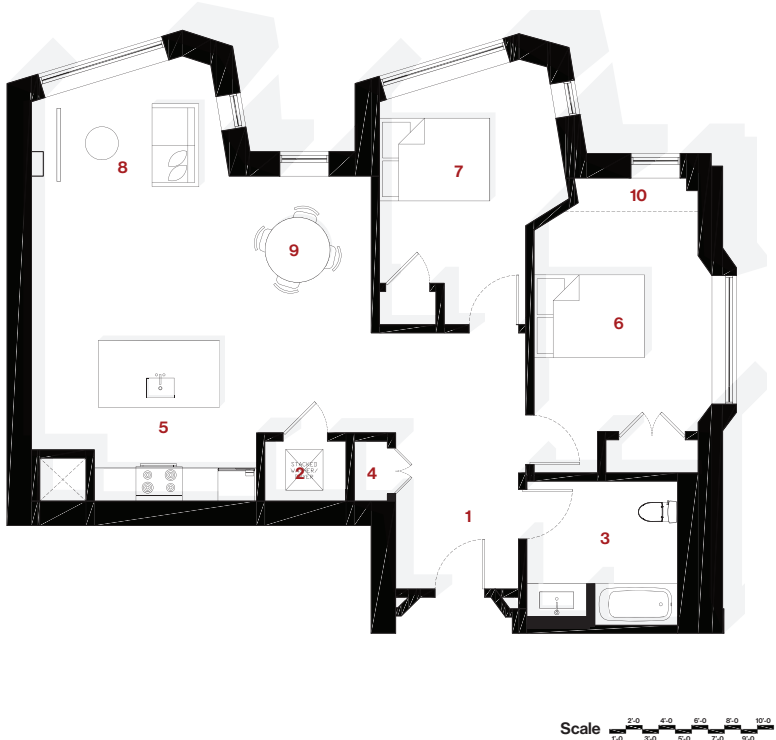
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designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
Bacap. (2021, September 29). Assemble chicago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chicago-envisioning-a-net-zero-apartment-building-in-chicagos-loop/>

Residential Floorplans
(Original Drawings)

Legend

- 1 Foyer
- 2 Laundry
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed
- 7 Bed 2
- 8 Living Room
- 9 Dining Room
- 10 Study



Two Bedroom Unit

Bedrooms - 2
Baths - 1

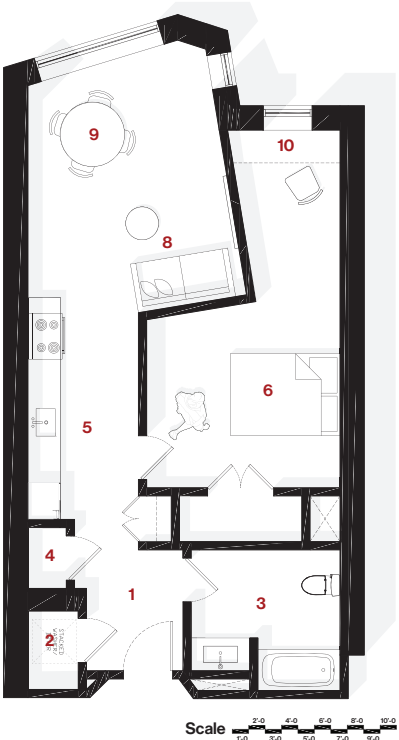
Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

Area: 1060 SQFT

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
Bacap. (2021, September 29). Assemble chicago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chicago-envisioning-a-net-zero-apartment-building-in-chicago-loop/>



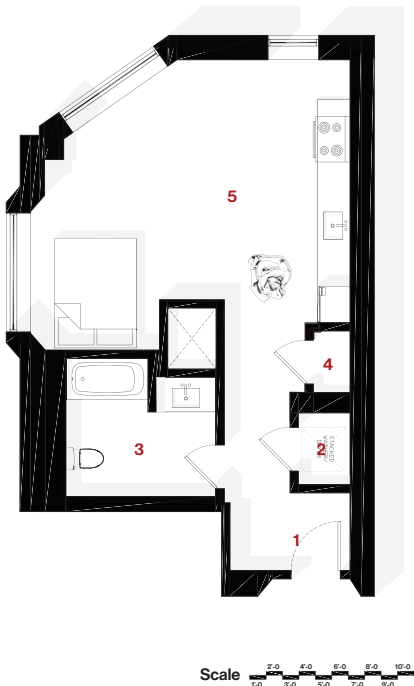
One Bedroom Unit

Bedrooms - 1
Baths - 1

Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

Area: 689 SQFT



Studio Unit

Bedrooms - 0
Baths - 1

Extras:

Laundry (Washer/Dryer), Accessible

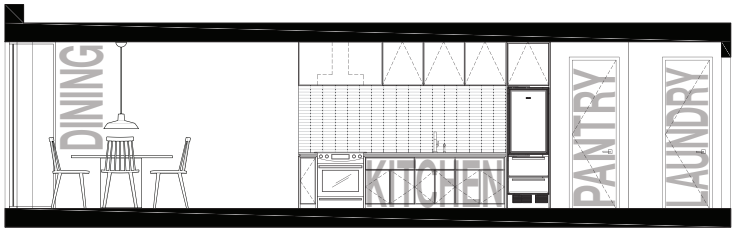
Area: 500 SQFT

Residential Sections
(Original Drawings)

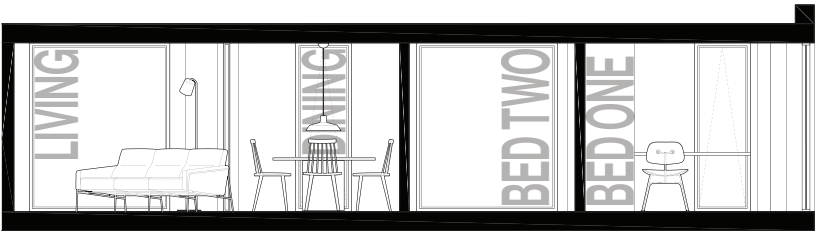
Studio Unit Section



One Bedroom Unit Section



Two Bedroom Unit Section



Scale 1'-0" 2'-0" 3'-0" 4'-0" 5'-0" 6'-0" 7'-0" 8'-0" 9'-0" 10'-0"

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
Bacap. (2021, September 29). Assemble chicago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chicago-envisioning-a-net-zero-apartment-building-in-chicagos-loop/>

Summary



References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
 Bacap. (2021, September 29). Assemble chicago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chicago-envisioning-a-net-zero-apartment-building-in-chicagos-loop/>

Key Takeaways & Lessons

Affordable Housing Focus

Assemble Chicago is all about creating 100% affordable housing in the heart of downtown. With 207 units (a mix of studios and multi-bedroom apartments), the project is designed to serve a diverse population while promoting an inclusive urban community.

Sustainability First

The building is set up to achieve net-zero energy, which means it generates as much energy as it uses. This is done through key features like:

- Solar panels on the roof to generate renewable energy.
- An energy-efficient facade that reduces heat loss and maximizes natural light.
- A green roof and stormwater planters that manage rainwater and reduce heat in the urban environment.

Community Driven Design

The building prioritizes spaces for people to connect, with shared lounges, terraces, and even retail spaces at street level to engage the public. The idea is to mix private living with opportunities for social interaction, building a tight-knit community.

Conclusion

This mix of affordable housing, sustainable design, and community spaces makes Assemble Chicago a solid model for future urban developments. It's not just about building places to live; it's about building a better way to live together.

PE1 - Research Assignment *Module One*



The Bradbury Building

INITIAL SUMMARY

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Module 1.1

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References

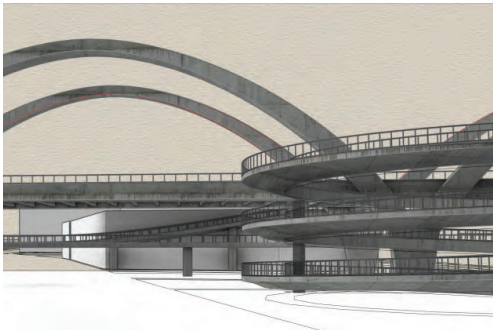
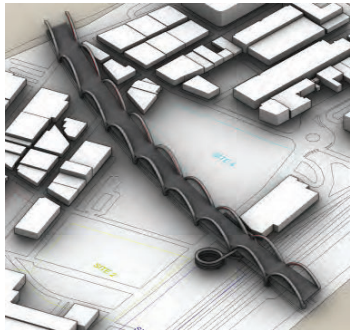
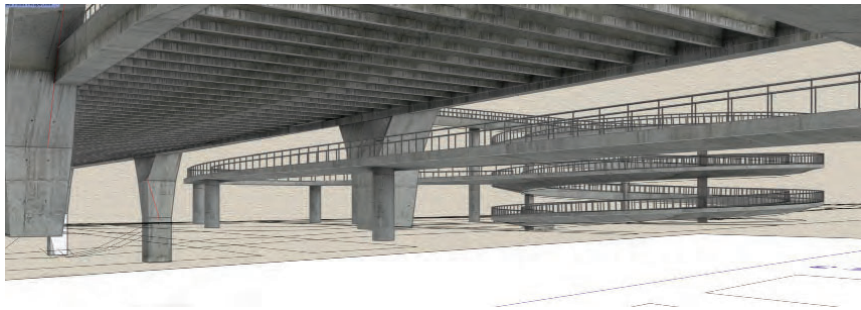
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SUB-TOPICS

In the following research package, we will cover several key topics related to heritage conservation and urban development. We begin with an overview of the **Rhino Model**, followed by an in-depth analysis of **Conservation and Heritage in Downtown Los Angeles**, focusing on the National Register of Historic Places, the balance between development and heritage, and the importance of cultural identity. We will also explore **Conservation and Heritage in Boyle Heights**, addressing issues like affordable housing, gentrification, and zoning regulations. Additionally, we'll look at the **Assemble Chicago Case Study**, which highlights sustainable urban development and affordable housing. The presentation will conclude with key takeaways on balancing growth with historical preservation, sustainability, and community identity.

Rhino Model
Module 1.1

Sixth Street Viaduct Bridge



Shots from Rhino Model



Shots from Google Earth

Conservation and Heritage in Downtown LA Summary

Module 1.2

National Register of Historic Places



National Register of Historic Places Plaque

What is it?

*"The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the **National Historic Preservation Act of 1966**, the National Park Service's National Register of Historic Places is part of a national program to coordinate and **support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.**"*

-NATIONAL PARK SERVICE (NPS.GOV)

The Mission

- Review nominations that Americans believe are worthy of preservation submitted by states, tribes, and other federal agencies and list eligible properties in the National Register
- Offer guidance on evaluating, documenting, and listing different types of historic places through the National Register Bulletin series and other publications
- Help qualified historic properties receive preservation benefits and incentives

-NATIONAL PARK SERVICE (NPS.GOV)

The Importance

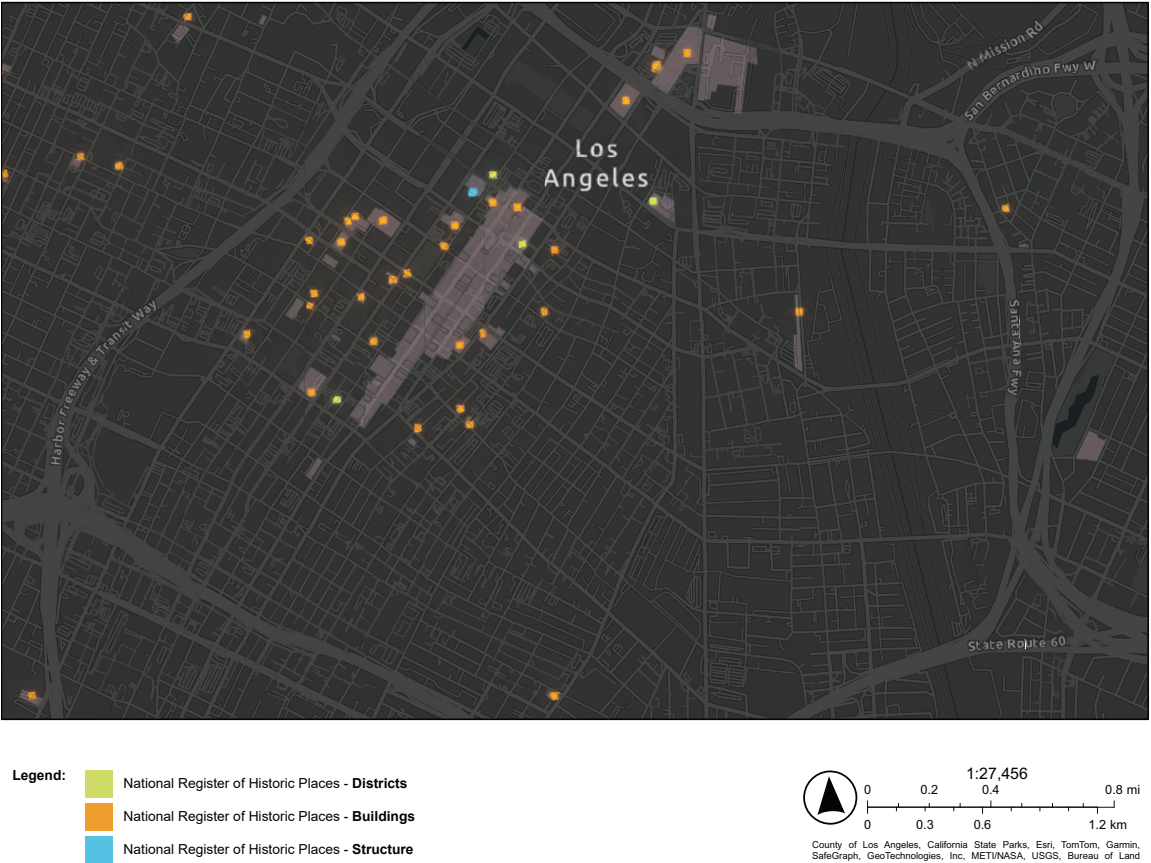
The National Register of Historic Places is crucial in the preservation of American history. It protects the historical and architectural aspect of the United States, and not only offers protection, but financial support to maintain and revitalize to significant locations.

With the preservations of these sites, Americans gain the opportunity to develop a understanding and appreciation of the countrys heritage and culture for generations to come.

References:

"What Is the National Register of Historic Places?" National Parks Service. Accessed September 1, 2024. <https://www.nps.gov/subjects/nationalregister/what-is-the-national-register.htm>.

Historic Districts Overlay Map



About the Historic Districts



Broadway Central Theatre District circa 1928



House of Culture in Little Tokyo circa 1950s



Ralphs Bros. Grocery and New York Bakery - Sixth and Spring Street

Broadway Theatre District

Historic Significance and Modern Development

The Broadway Theatre & Commercial District in Downtown Los Angeles is a historically significant area reflecting the city's early 20th-century culture and the rise of its entertainment and commercial sectors. The district became known for its grand theatres and shopping centers, which transformed formerly residential areas, such as those south of Third Street, into commercial zones. One notable development was the opening of Hamburger's department store in 1905. Today, maintaining a balance between growth and heritage conservation is essential to preserve the district's historical architecture.

Little Tokyo Historic District

Historic Significance and Modern Development

Little Tokyo in Downtown Los Angeles is a vital part of Japanese-American history and one of only three official Japan Towns in the U.S. With a rich cultural heritage spanning over a century, it has been a hub for Japanese-American businesses, cultural institutions, and religious sites. It also serves as a reminder of the injustices faced by Japanese Americans during WWII. Beyond its physical presence, Little Tokyo symbolizes cultural resilience and identity. However, its proximity to Downtown LA and the Arts District makes it a target for developers, raising concerns about preserving its heritage amidst ongoing urban growth.

Spring Street Financial District

The Spring Street Financial District was the financial hub of Los Angeles from the late 19th to mid-20th century, often called the "Wall Street of Los Angeles." Known for its Beaux-Arts, Art Deco, and Neoclassical buildings, the district once housed banks, investment firms, and corporate headquarters, symbolizing the city's economic boom during that era.

On the right is an interesting case study on how an old building can be retrofitted to offer new uses. ----->

Main Take-Aways

Downtown Los Angeles is a rich landscape of historical districts undergoing revitalization through conservation, heritage preservation, and urban infill. Key areas like the Broadway Theatre & Commercial District, Little Tokyo, and the Spring Street Financial District showcase LA's historical and cultural significance. Efforts like adaptive reuse and initiatives such as "Bringing Back Broadway" prioritize maintaining the architectural and cultural heritage while integrating modern mixed-use housing and commercial spaces. This balance stimulates economic growth while preserving historic identity, as seen in the transformation of historic buildings into loft apartments and event venues. However, areas like Little Tokyo face pressure from developers, highlighting the ongoing challenge of balancing development with cultural preservation.

When designing in historically significant areas like Downtown Los Angeles, several key lessons can be applied to ensure successful integration of modern development with heritage conservation:

Respect Historical Context

Understand the cultural and architectural history of the area, using design elements that complement the existing heritage. This ensures that new developments honor the area's legacy rather than overpower it.

Sustainability and Energy Efficiency

Integrate sustainable design principles, such as cross-ventilation and energy-efficient systems, to modernize without sacrificing historical integrity. This can be achieved through thoughtful, site-specific strategies that support long-term viability.

Adaptive Reuse

Instead of demolishing old structures, repurpose them for new functions (e.g., converting old commercial buildings into lofts or mixed-use spaces). This preserves the historical architecture while meeting modern needs.

Community Involvement

Engage with local communities and cultural institutions to ensure designs respect the area's heritage and identity. Projects should enhance the social and cultural fabric, not disrupt it.

Spring Arcade Building



1924

2024



Residential Lofts

The upper floors of the building have been converted into residential lofts, attracting tenants interested in urban living with historical charm.

Food and Retail Spaces

Hosts a variety of food vendors, cafes, and unique retail shops, becoming a popular destination for both locals and tourists.

Event Space

Is an attractive venue for events, pop-up markets, and art shows.

Creative Offices

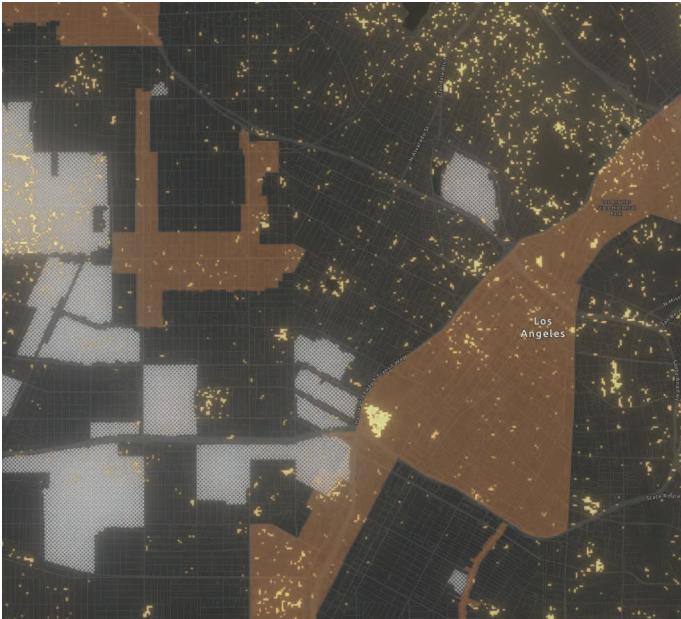
Offices are used often by creative businesses, startups, and tech companies.

References:

Counter, Bill. "Broadway Theatre." Broadway Theatre. Accessed September 1, 2024. <https://losangeletheatres.blogspot.com/2019/01/broadway-theatre.html>.
 "California: Broadway Theater and Commercial District (U.S. National Park Service)." National Parks Service. Accessed September 1, 2024. <https://www.nps.gov/places/broadway-theater-and-commercial-district.htm>.
 Pearson, B. (2020, July 1). After internment, a store was born. it's still an L.A. Staple. The New York Times. <https://www.nytimes.com/2020/07/01/magazine/little-tokyo-bunkado-los-angeles-japanese.html>
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 Home. LA Conservancy. (2024, August 26). <https://www.laconservancy.org/>
 Contributor, R. (2023, December 20). Bronzeville: The Rise and Fall of Little Tokyo's Black Community. Rafu Shimpo. <https://rafu.com/2023/03/bronzeville-the-rise-and-fall-of-little-tokyos-black-community/>

Balancing Development With Heritage

Map Overlay of DTLA



- Legend:
- New Development Zones
 - HPOZ (Heritage Protection Zones)
 - Adaptive Reuse Incentive Zone

References:

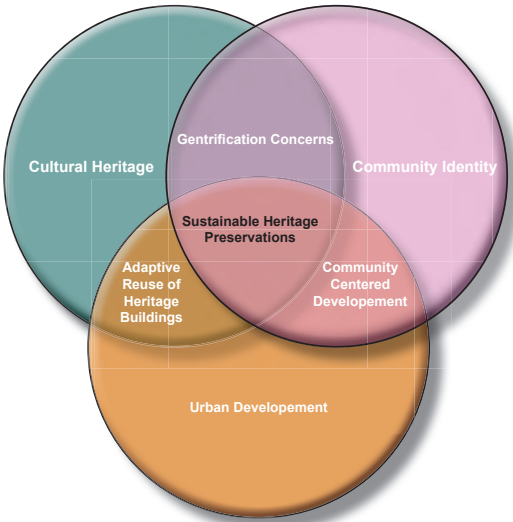
City of La Profile. Home | Los Angeles City Planning. (n.d.). <https://planning.lacity.gov/>
American Legal Publishing. Official City of los angeles municipal code. Cincinnati, OH.
Home. LA Conservancy. (2024, August 26). <https://www.laconservancy.org/>

Zoning By-Laws & Legal Protection

- HPOZ (History Preservation Overlay Zone)
 - Any new development must be reviewed and approved by the Preservation Board or a city planning commission to ensure that whatever is proposed is in line with the historical context.
- Adaptive Reuse Ordinance
 - Allows for conversion of older buildings into new uses
 - Encourages developers to keep existing structures while adding new functions
 - Provides financial incentives for Adaptive Reuse projects
- New Development Zones
 - DTLA has seen a spike in new developments
 - The yellow spots on the map showcases the hotspots for urban infill and mixed use developments.
 - The proximity of these new developments to historic sites or HPOZ's, rely on a careful balance.

Cultural Heritage + Community Identity

Cultural Heritage, Community Identity and Urban Development



Correlations

Cultural Heritage + Community Identity

Cultural heritage affects **Community Identity** directly. Places like downtown Los Angeles have iconic historic sites that contribute to the character of the neighborhoods. Preserved heritage also strengthens community pride and provides a shared history for residents.

Cultural Heritage + Urban Development

Thoughtful **urban development** can support **heritage preservation** by integrating historic sites into new projects through adaptive reuse or contextual design. Developers can enhance the value of their projects by integrating these historic aspects.

Community Identity + Urban Development

Sustainable **Urban Development** should aim to respect and enhance the **Identity** of the existing communities rather than displace them. Projects that involve locals and addresses their needs can lead to a growth that is both inclusive and respectful to local culture.

Community Identity + Urban Development + Cultural Heritage

The ideal balance where development respects and enhances both the historical significance of the area and the needs of the local community. This might involve integrating new infrastructure into the existing historical fabric, promoting inclusive growth, and ensuring that local culture remains visible and is valued. An example of this can be seen in the adaptive reuse of **The Ace Hotel**, which preserved the United Artists Theatre, while converting the building into a luxury hotel, supporting both heritage preservation and economic revitalization.

Sustainability and Long Term Viability



Santa Fe Freight yard converted into new SCI-Arc campus

References:

Adaptive reuse ordinance: 20 years of preservation in Downtown Los Angeles. LA Conservancy. (2023, September 26). <https://www.laconservancy.org/blog/adaptive-reuse-ordinance-20-years-of-preservation-in-downtown-los-angeles/>
Sharp, S. (2020, March 24). First look at row DTLA. Urbanize LA. <https://la.urbanize.city/post/first-look-row-dtla>
ARC building history spans decades as well as neighborhoods of Los Angeles - sci-arc. SCI. (n.d.). <https://www.sciarc.edu/news/2022/sci-arc-building-history-spans-decades-as-well-as-neighborhoods-of-los-angeles>
Rypkema, D. (2005). "The Economics of Historic Preservation: A Community Leader's Guide." National Trust for Historic Preservation
Home. LA Conservancy. (2024, September 5). <https://www.laconservancy.org/>
Leichenko, R. M., Coulson, N. E., & Listokin, D. (2001). "Historic Preservation and Residential Property Values: An Analysis of Texas Cities." Urban Studies, 38(11)

Sustainability in Heritage Conservation

Long Term Viability

Reducing Environmental Impact

The demolition of buildings creates a significant waste and requires energy-intensive processes. Through strategies like adaptive reuse, we can reduce demolition waste, conserve resources and limit our carbon footprint associated with new construction.

Energy Efficiency

Many historic buildings can be retrofitted with modern, energy efficient systems. These systems are installed without compromising the historical integrity of the structures. By upgrading insulation, heating and cooling systems, and windows, these historic buildings can meet sustainability standards, while maintaining their original character.

Sustainable Urban Growth

When we preserve and reuse existing structures, we contribute to sustainable urban growth. Its direct impact on it is due to the fact that instead of tearing down and expanding outwards, we can focus on maintaining and enhancing what is already there, which leads to a more efficient use of land and infrastructure.

Adaptive Reuse

Repurposing historic buildings for modern uses (offices, apartments, etc.), will help preserve character while meeting market demands.

Heritage Tourism

Leveraging cultural heritage to attract tourists and generate revenue through tours, fees, and local businesses. (Like seen in the example of the Broadway Theatre District)

Tax Incentives and Grants

Utilizing financial incentives like federal tax credits and local grants to offset restoration costs.

Increased Property Value

Historic districts tend to see higher property values due to their sophisticated and unique architecture, and rich culture.



New Sixth Street Viaduct is reminiscent of its predecessors arches and form.

References:

Sixth street viaduct replacement project. Sixth Street Viaduct Replacement Project | Bureau of Engineering. (n.d.). <https://engineering.lacity.gov/about-us/major-projects/sixth-street-viaduct-replacement-project>

Design Integration and Aesthetics

Contextual Design

Incorporation of Historic Elements

New infill developments must be designed with sensitivity to the existing urban fabric.

Strategies

- Matching Materials
- Scale
- Reflection of surrounding architectural styles
- History

Case Study

Sixth Street Viaduct

Due to structural concerns with the old Sixth Street Bridge, demolition became necessary. Architect Michael Maltzan was commissioned to design the new bridge, creating a structure that pays homage to its predecessor. While incorporating modern elements, the new design echoes the original with its signature arches and overall aesthetic, blending respect for the past with a contemporary update. Though the old bridge was removed, the replacement honors its legacy, ensuring its spirit remains a lasting part of Los Angeles' history.

Adaptive Reuse

- Exploring new ways to repurpose existing structures
- An example for our site could be the conversion of old factories and warehouses into mixed-use residential and commercial spaces

Incorporation of Historic Elements

- Integrating preserved facades
- Matching new materials to surrounding context
- Design elements that pull together the existing culture and language

Challenges of Preservation

- Challenge of maintaining existing structure
- Meeting modern building codes
- In compliance to new safety standards
- Accessibility

Takeaways from Conservation and Heritage in Downtown Los Angeles

Building Developement with Heritage Conservation

The **cultural heritage** of downtown Los Angeles, reflected in its historic districts and iconic structures, is essential for preserving the city's identity. However, balancing **development and conservation** poses challenges as the city continues to grow. Utilizing adaptive reuse allows modern needs to be met while maintaining historical integrity. Following **preservation regulations and guidelines** is crucial to protecting these areas during redevelopment. This approach promotes **sustainability and economic growth**, fostering a vibrant urban environment where history and innovation coexist, providing a model for **the future of urban growth**.

Cultural Heritage + Community Identity

Urban infill and mixed-use housing projects in Downtown LA, such as the Ace Hotel and the Wilshire Boulevard Temple with the Audrey Irmas Pavilion, highlight the vital role of community engagement in successful development. These projects illustrate that preserving cultural heritage is not just about protecting buildings but also about safeguarding the community's identity. To mitigate the risks of gentrification, it is essential that new developments incorporate affordable housing and respect the neighborhood's social fabric, ensuring the community's essence remains intact. Key takeaways include the **importance of community consultation** to align development with cultural and social values, the need for a **broader approach to cultural heritage preservation**, and the necessity of **balancing growth with affordability** to protect the community's character, which is fundamental to sustainable urban development.

Sustainability and Long Term Viability

Moving into the present day and looking ahead towards the future of Los Angeles, the **integration of sustainable design** becomes crucial in urban infill projects, to ensure its long-term existence in downtown LA. It can be in the form of green roofs, using energy-efficient materials, all the down to how public-transit can be optimized. When preserving historical buildings, the economic aspects must also be considered. Bringing in **mixed-use spaces**, the community can generate its own income to afford all of the upkeep and costs that come with revitalization.

Case Studies and Precedents

Spring Arcade Building
Sci-ARC
6th Street Viaduct

Los Angeles, California

Conservation and Heritage in Boyle Heights Summary

Module 1.3

Cultural Heritage & Community Identity



Mariachi Band member walking in Mariachi Plaza, Boyle Heights

Respect for Cultural Landmarks

- Ensuring that new developments respect culturally significant sites important to local community

Community Involvement

- Engaging with cultural organizations and local residents
- Discussing redevelopment plans to see if they are in line with the communities vision

Case Study

Mariachi Plaza

History

- Located in Boyle Heights
- Mariachi Bands have gathered here since the 1930's
- A Hub for music, social gatherings and cultural events

Considerations for Development

- Redevelopment should be sensitive to its cultural significance and use
- A public space for gathering
- Maintain its architectural style and public art



Ice cream shop in Marachi Plaza, Boyle Heights



Traditional latino murals, Mariachi Plaza

References:

November 18, 2020 | Betty Marin | Comments. (n.d.). The sounds of California in Boyle Heights, Los Angeles. Smithsonian Center for Folklife and Cultural Heritage. <https://folklife.si.edu/magazine/sounds-of-california-boyle-heights-los-angeles>
Bermudez, E. (2014). Mariachi plaza development plan worries l.a. musicians. Los Angeles Time. Retrieved from <https://www.latimes.com/local/california/la-me-mariachi-plaza-20141201-story.html>.

Affordable Housing and Gentrification Concerns



The Lorena Project, an affordable housing development currently underway

References:

Development without displacement. East LA Community Corporation. (n.d.). <https://www.elacc.org/>
RSO Overview. LAHD. (n.d.). <https://housing2.lacity.org/residents/rso-overview>

Affordable Housing Integration

- New developments should consider including affordable housing options to prevent displacement of the long-term residents of the area

Resources

Affordable Housing Development Projects

- Addresses housing needs while ensuring such projects as "The Lorena Project", are sensitive to local cultural and historical concerns
- Ensuring community input and transparency in the planning process

Community Land Trusts (CLTs)

- Created by the East Los Angeles Community Corporation (ELACC)
- A Non-Profit organization
- Acquires and Manages land to provide affordable housing and prevent displacement by retaining ownership of the land
- Provides affordability for future generations
- Secures long term affordability against gentrification

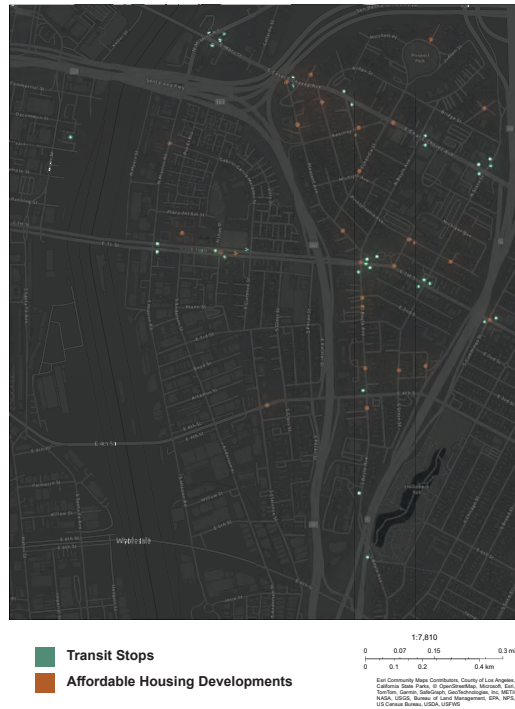
Equitable Development

- a community-centered approach to planning and growth that ensures all residents, especially marginalized groups, benefit fairly from economic, social, and environmental improvements.

Tenant Protections and Rent Control

- Community groups in Boyle Heights advocate for stronger tenant protections to address gentrification, including:
 - Expanding rent control.
 - Implementing just-cause eviction laws.
 - Los Angeles has enacted policies to prevent displacement, such as:
 - Rent Stabilization Ordinance (RSO): Limits rent increases for certain older housing stock.
- Strengthen rent control.
- Enforce just-cause eviction ordinances.
- Provide rental assistance programs.
- Ensure new developments comply with these regulations to prevent displacement.

Zoning and MATCH



Inclusionary Zoning Policies

Affordable Housing Linkage Fee

- Developers pay a fee based on the size and type of the project.
- The fee supports the development of affordable housing projects throughout the city.

Mandatory Affordable Housing Program

- Requires new residential projects to include a percentage of affordable units.
- The percentage varies depending on the project's size and location.

Density Bonus Program

- Allows developers to build more units than normally permitted if they include affordable housing.
- Provides incentives such as increased height limits or reduced parking requirements.

Transit-Oriented Communities (TOC) Program

- Developers pay a fee based on the size and type of the project.
- The fee supports the development of affordable housing projects throughout the city.

Affordable Housing Incentive Program (AHIP)

- Offers additional incentives for projects that exceed the minimum affordable housing requirements.
- Can include benefits such as reduced fees or expedited permit processing.

Metro Affordable Transit Connected Housing (MATCH)

MATCH is a financing program designed to support the development and preservation of affordable housing near public transit stations in Los Angeles.

- Expands the availability of affordable housing in proximity to transit, making it easier for low-income families to access public transportation
- Residents save on commuting expenses by living near transit.
- Helps stabilize neighborhoods by preserving existing affordable housing and supporting new developments.
- Encourages living in transit-accessible areas, which lowers the need for car travel and decreases overall emissions.
- Promotes transit-oriented development, which supports more sustainable urban growth.
- Helps protect existing low-income residents from being displaced due to rising rents and gentrification.
- Aligns with LA Metro's broader initiative to ensure that low-income transit riders can continue to live close to frequent and accessible public transportation.

References:

Affordable Housing Linkage Fee Background. LAHD. (n.d.-a). <https://housing2.lacity.org/policy-data/affordable-housing-linkage-fee-background>
Affordable Rental Housing. LAHD. (n.d.-b). <https://housing2.lacity.org/housing/affordable-housing>
Density bonus. Density Bonus | Los Angeles City Planning. (n.d.). <https://planning.lacity.gov/plans-policies/density-bonus-program>
Transit Oriented Communities Incentive Program. Transit Oriented Communities Incentive Program | Los Angeles City Planning. (n.d.). <https://planning.lacity.gov/plans-policies/transit-oriented-communities-incentive-program>
Citywide Housing Incentive Program (Chip) Ordinance. (n.d.). https://planning.lacity.gov/odocument/a38fe378-2c4b-4260-807e-af66a053a95b/FD_CHIP_Fact_Sheet.pdf
Metro Affordable Transit Connected Housing Program (match). Golden State Acquisition Fund. (n.d.). <https://www.matchfunda.com/#/~:text=MATCH%20provides%20critical%20funding%20to,housing%20opportunities%20at%20favorable%20terms.>

Takeaways from Conservation and Heritage in Downtown Los Angeles

Cultural Heritage & Community Identity

This study emphasizes the importance of preserving cultural heritage and maintaining community identity during urban development in Boyle Heights, Los Angeles. Key to this approach is ensuring that new projects respect culturally significant landmarks, such as Mariachi Plaza, which has long been a hub for music and social gatherings in the area. Ensuring that developments align with community values involves engaging local residents and cultural organizations in the planning process, ensuring their voices are heard and that the redevelopment reflects their vision for the neighborhood.

Affordable Housing & Gentrification Concerns

Affordable housing is a major concern in Boyle Heights, particularly as gentrification continues to displace long-term residents. The integration of affordable housing into new developments is critical to maintaining the community's social fabric. Projects like the Lorena Project highlight efforts to create affordable housing options that are sensitive to both cultural and historical concerns. Alongside this, equitable development is prioritized to ensure that marginalized groups, especially low-income residents, benefit from economic and environmental improvements. Tenant protections, such as rent control and just-cause eviction laws, are essential to safeguarding residents from displacement.

Zoning & MATCH Program

Zoning policies and programs like the Metro Affordable Transit Connected Housing (MATCH) initiative play a significant role in addressing these issues. Inclusionary zoning policies, such as the Density Bonus Program and the Transit-Oriented Communities (TOC) program, incentivize developers to include affordable housing units, particularly near transit hubs. The MATCH program itself aims to increase the availability of affordable housing in transit-accessible areas, helping to stabilize low-income neighborhoods and reduce transportation costs for residents. This holistic approach not only promotes sustainable growth but also protects existing communities from the adverse effects of gentrification while providing long-term affordability.

Case Studies and Precedents

The Lorena Project
Mariachi Plaza

Boyle Heights, Los Angeles,
California

Assemble Chicago Case Study
Module 1.4

Assemble Chicago



Render of the Proposed "Assemble Chicago" Building

References:

Sixth street viaduct replacement project. Sixth Street Viaduct Replacement Project | Bureau of Engineering. (n.d.). <https://engineering.lacity.gov/about-us/major-projects/sixth-street-viaduct-replacement-project>

Overview

“Assemble Chicago” offers valuable insights into how affordable housing can successfully **integrate with sustainable design**. One of the key lessons from this project is the importance of **incorporating net-zero energy solutions** in urban residential buildings, demonstrating that **sustainability can be achieved without compromising affordability**. Additionally, the mixed-use development approach highlights the significance of creating vibrant community spaces that encourage social interaction and contribute to the local urban fabric. The project underscores the potential of urban infill to revitalize city centers, addressing both **housing shortages and environmental goals simultaneously**. Studio Gang's design emphasizes the critical role of architecture in promoting environmental responsibility through energy-efficient materials and systems. Ultimately, the project teaches that **fostering community engagement is just as essential as sustainability in affordable housing design**. The takeaway for future projects is the need to strike a balance between **meeting housing demands, creating communal spaces, and advancing sustainability efforts**.

Project Stats

Year Proposed: 2020
Location: Lakeside, Downtown Chicago, IL, USA
Size: 250,000 SQFT
Units: 207 Affordable Housing Units
Architects: Studio Gang x TCB (The Community Builders)

Purpose

- Mixed-use development (residential, commercial, community spaces)
- Focus on affordable housing in a high-demand urban area
- Net-zero energy building with sustainable design elements

The Importance

- Addresses Chicago's housing crisis in a central location
- Exemplifies sustainable urban living, integrating public amenities and community-building

Urban Context

- Located in downtown Chicago, “Assemble Chicago” integrates into a dense urban fabric.
- Positioned near major transportation hubs, including public transit and bike routes.
- Surrounded by key amenities such as parks, schools, shopping centers, and cultural institutions.
- Contributes to the revitalization of the surrounding area through urban infill development.
- Designed to enhance walkability, encouraging pedestrian engagement with nearby services and spaces.
- Acts as a catalyst for social and economic activity, supporting local businesses and community services.
- Reflects Studio Gang’s commitment to creating projects that foster urban connectivity and sustainability.

Sustainability



Sustainability Diagram

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
Bacap. (2021, September 29). Assemble chicago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chicago-envisioning-a-net-zero-apartment-buildingin-chicagos-loop/>

Solar Panels

The rooftop of Assemble Chicago is fitted with solar panels, which play a significant role in the building's goal to achieve net-zero energy. These panels generate renewable energy that powers much of the building's operations, reducing its reliance on non-renewable energy sources. This sustainable energy approach contributes directly to reducing the building's overall carbon footprint.

Facade Design

The building's facade is carefully designed to be both aesthetically pleasing and energy-efficient. With a 25% window-to-wall ratio, the facade limits heat loss, improves thermal efficiency, and maximizes daylight while reducing the need for artificial lighting. This design approach lowers overall energy consumption, supporting the project's sustainable goals.

Rooftop Garden

The rooftop garden serves multiple purposes. Beyond providing a green, relaxing space for residents, it helps to reduce the urban heat island effect and manage stormwater. The garden also enhances biodiversity in the city and improves air quality, contributing to the building's environmental goals.

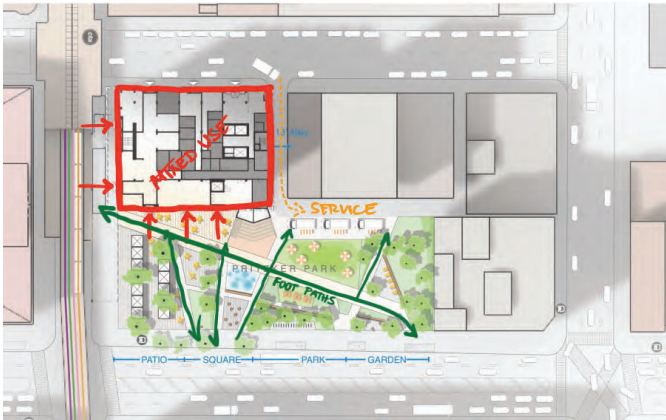
Storm Water Planters

The building incorporates stormwater planters that help manage rainwater runoff. These planters collect and filter rainwater, reducing strain on the city's drainage systems and minimizing the risk of flooding. They also add greenery to the building's exterior, contributing to its eco-friendly and aesthetic appeal.

Permeable Pavers

Assemble Chicago uses permeable pavers in exterior areas, such as pathways and courtyards. These pavers allow rainwater to seep into the ground, reducing runoff and promoting natural water filtration. This not only helps manage stormwater but also supports the building's broader sustainability efforts by mitigating urban flooding risks.

Programming Study

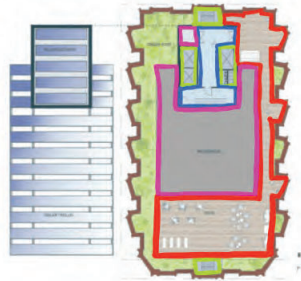


- (SEMI-PRIVATE)
MIXED-USE
- (PRIVATE)
RESIDENTIAL
- (PUBLIC)
- CLASSROOMS
 - RETAIL
 - FOOD HALL
 - OUTDOOR SPACE
 - FLEX SPACE

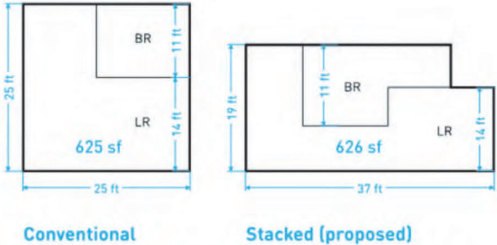
References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chigago-clean-carbon-neutral-low-income-residential-06-16-2021/>
Bacap. (2021, September 29). Assemble chigago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chigago-envisioning-a-net-zero-apartment-building-in-chicagos-loop/>

PRIVATE SERVICE SEMI-PRIVATE VERTICAL CIRCULATION



Plan Study and Re-Creation



Unit Proportion Diagram showing how the proposed stacked layout will allow for a more efficient layout of units on the given site.

Variety of Unit Types

The residential floors include a variety of units ranging from studios to multi-bedroom apartments, making the development accessible to a diverse group of residents. Each unit is optimized for space efficiency, with layouts that maximize livable areas without wasting square footage. Even in smaller units like studios, the design ensures comfortable living with clearly defined spaces for sleeping, dining, and working

Energy Efficiency & Natural Light

All units are designed with sustainability in mind. The 25% window-to-wall ratio continues across all floors, allowing ample natural light into each apartment while minimizing heat loss. This strategic placement reduces the need for artificial lighting and cooling, which helps the building meet its net-zero energy goals

Inclusive & Accessible Design

The design of the residential floors ensures accessibility for all residents. Some units are specifically designed to be ADA-compliant, making the building inclusive for individuals with disabilities. The layouts are adaptable and flexible, allowing residents to personalize their spaces as needed

References:

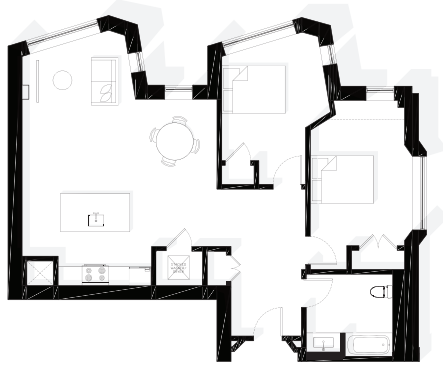
Assemble Chicago – designbridge. (n.d.-a). <https://designbridgetld.com/assemble-chicago/>



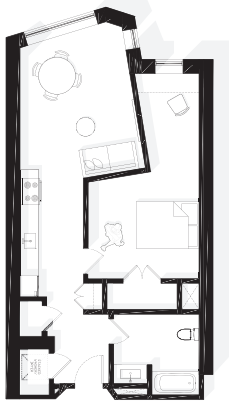
OTWO BEDROOM UNITS
ONE BEDROOM UNITS
STUDIO UNITS

Plan Study and Re-Creation

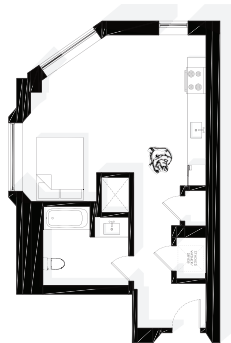
Two Bedroom Unit



One Bedroom Unit



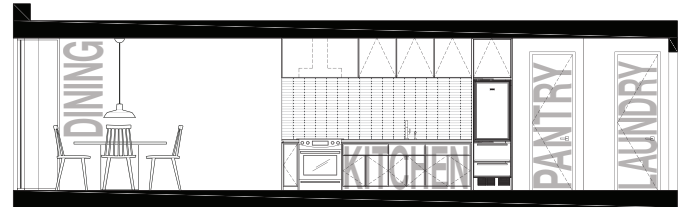
Studio Unit Section



Studio Unit Section



One Bedroom Unit Section



Two Bedroom Unit Section



References:

Assemble Chicago – designbridge. (n.d.-a). <https://designbridgetld.com/assemble-chicago/>

Conclusion
A Brief Summary of Module 1

Conclusion

Conservation and Heritage

Downtown LA & Boyle Heights

Preservation of cultural heritage is key to maintaining identity and community values. Historic districts, such as Broadway Theatre and Little Tokyo, demonstrate the balance between growth and heritage.

Challenges

Balancing urban development with cultural preservation to protect historic architecture and prevent gentrification.

Sustainable Urban Development

Adaptive Reuse

Emphasizing the importance of repurposing old structures for new uses (e.g., housing, commercial spaces) to reduce environmental impact.

Energy Efficiency & Longevity

Incorporating modern systems into historic buildings helps meet sustainability goals without compromising heritage.

Community Engagement and Identity

Community-Centered Growth

Involvement of local residents and cultural institutions is critical in maintaining cultural integrity during redevelopment.

Affordable Housing

Programs like MATCH ensure sustainable and inclusive development, preventing displacement due to rising costs.

Case Studies & Precedents

Assemble Chicago

A net-zero energy, mixed-use development that integrates sustainability, affordable housing, and community spaces, demonstrating how cities can grow responsibly while addressing housing needs.

Key Takeaways

Successful urban development respects both the past and future. Strategies like adaptive reuse, energy efficiency, and community engagement create a balanced approach for growth in historically significant areas.

M.Arch Year One 2024 Module One

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Module 2

Conceptual Design

Assignment A 2.1

Community Values

This assignment will ask students to acquire a deeper understanding of the community members and culture associated with the surrounding context, considering the past, present, and how that informs your proposal that will contribute to envisioning its future.

Deliverables

- A single, consolidated PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Slide identifying a minimum five (5) and maximum ten (10) key takeaways from the research, that will form initial directions for the design of your project. This will be in bullet point format similar to earlier exercises. Please review / refer to your research while defining this list
- Diagramming and information to describe each of your five (5) community members / residents informed by your research. Be sure to include a housing type and architectural typology that you feel would be appropriate to serve each community member / resident
- Line drawing of typical floor plan of residential space for each of the five (5) community members / residents
- Line drawing of section of residential space for each of the five (5) community members / residents
- Graphic representation or diagram representing relationships between community members, identifies possible common spaces shared amongst residents, and gives consideration to public / private relationships
- Upload link to a 5-minute recording of yourself presenting the PDF document. Please do not direct upload.

Assignment A 2.2

Community Framework Plan

This assignment will ask students to select a project site and begin to define and document specific responses to surrounding context, while continuing to address the areas identified in the research and accommodating the range of community members defined in Module 2.1.

Deliverables

- A single, consolidated PDF document, Tabloid Format,

Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This document is expected to contain the following minimum materials:

- Isometric diagram(s) utilizing the digital context model you created identifying the contextual factors that have been identified in Module 2.1 (and will form the basis for further design exploration throughout Module 2)
- Site plan diagram showing immediate surroundings and parameters and opportunities for the development of your design
- Four images (from NE, SE, SW, NW aerial view) taken of your physical study model
- Upload link to a 5-minute recording of yourself presenting the PDF document. Please do not direct upload.

Assignment A 2.3

Building Logics

This assignment will task students with translating your research, community framework development, and site/context analysis into an iterative conceptual design process, including project: programming, massing, organization and circulation.

Deliverables

- A single, consolidated PDF document, Tabloid size, Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Table, matrix, or chart defining primary program areas, allocations, and sizes of each (within the program ranges provided previously)
- Isometric diagram illustrating three (3) different approaches / organizations of primary program areas on site and related to surrounding context (each should prioritize a separate approach that you will describe as an extension of the research e.g. this is a study prioritizing access to open space, this is a study prioritizing communal living arrangements, this is a study prioritizing environmental considerations, etc.)
- Isometric diagram illustrating access and circulation (both horizontal and vertical components) from the street to each program area
- Isometric diagram illustrating gradient of public to private relationships
- Isometric diagrams of Massing Studies, including Testing of Typologies
- Floor Plan(s) (1/16"=1'-0)
- Two (2) Building Sections (1/16"=1'-0)
- Physical program massing model utilizing the physical context model base created in Module 2.2.
- Upload link to a 5-minute recording of yourself presenting the PDF document. Please do not direct upload.

Assignment A 2.4

Precedent Analysis

The goal of the exercise is to conduct research and analysis of a precedent housing project and document the essential elements of what is discovered in the research.

Students will be assigned a local housing project or program and will be asked to analyze and document the ideas and elements essential to each

Deliverables

Each student will be assigned and then asked to conduct independent topical research related to a specific subject, then generate:

- A single, consolidated 10-15 slide PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages) including diagrammatic mapping. Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Project stats (year built, size, number of units + type, etc.)
- Written narrative consolidating key ideas discovered during research
- Key diagrams, concept drawings, and illustrations -- must be original drawings, drawn by the student completing the study
- Architectural drawings (site plan, floor plan(s), sections(s), elevations, etc.) -- must be original drawings, drawn by the student completing the study
- Project imagery
- Summary of key ideas and lessons extrapolated from the precedent project
- Two of the following:
- A traced overlay of a section highlighting the main ideas / concepts in the project
- A traced overlay of a floor or site plan highlighting the main ideas / concepts in the project
- A traced overlay of an axonometric / isometric diagram highlighting the main ideas in the project
- Upload link to a 5-minute recording

Assignment A PE2

Conceptual Design Package

One of the outcomes of Module 2 will be a Conceptual Design Package comprising outcomes of assignments conducted throughout and discoveries relevant to each students exploration and development of programming, organization, circulation, pertinent code considerations, and project massing. This should represent your latest thinking and representative proposal for the project.

Deliverables

- Presentation (pre-recorded or live on Zoom) of their single, consolidated PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Summary of Primary Areas of Interest / Ideas
- Summary of Main Points Taken From Research Phase
- Process Work That Demonstrates the Evolution of Your Project
- Isometric Massing Diagrams (with surrounding context)
- Site context
- Site and project circulation / access + egress
- Programmatic organization
- Environmental / ecological factors
- Sustainable / regenerative design strategies (passive + active)
- Key diagrams / information responding to Design Principles
- Additional diagramming specific to illustrating student proposal
- Site Plan (1/32"=1'-0")
- Site + Building Section (1/32"=1'-0")
- Floor Plan(s) (1/16"=1'-0)
- Two (2) Building Sections (1/16"=1'-0)
- One cross and one longitudinal
- Minimum two (2) Exterior Perspectives
- 5 images of study model (NE, SE, SW, NW and top view)

Assemble Boyle Heights
Affordable Housing + Mixed Use
Los Angeles, California



Massing Model Render by Nicollas Jeronymo - Rhino + VRAY

INITIAL SUMMARY

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Takeaways

Social and Cultural Values

For an infill project to succeed in Boyle Heights, extensive community consultation is essential to ensure that development plans **align with the social and cultural values** of the existing neighborhoods. Preserving cultural heritage extends beyond architecture—it involves safeguarding the community's identity. As new developments emerge, concerns about gentrification rise, making it crucial to balance the introduction of affordable housing with the preservation of the neighborhood's character and the soul of the community.

Community Identity + Cultural Heritage

When designing for the future in Boyle Heights, the rich **cultural history and strong community identity must be respected**. New developments should not only complement the area's heritage but **actively work to preserve and enhance it**. This can be achieved through the careful **selection of materials, maintaining a scale that fits with the neighborhood, and incorporating architectural elements that reflect the local style**. In Boyle Heights, where cultural identity is deeply rooted, developers should engage in community consultation and collaborate with local leaders to ensure that new projects align with the area's values. Implementing mixed-use buildings can further strengthen the community by providing spaces for local businesses and social interaction, fostering a more connected and resilient neighborhood.

Mixed Use and Sustainable Design

As Los Angeles evolves, the integration of **sustainable design** in urban infill projects is essential for ensuring the long-term viability of areas like Boyle Heights. Sustainable features such as green roofs, energy-efficient materials, and improved public transit can significantly reduce the environmental impact while enhancing livability. In Boyle Heights, where economic challenges and cultural preservation are key concerns, mixed-use spaces offer a solution by generating income for the community and supporting the upkeep of revitalized areas. By **combining residential, commercial, and cultural spaces**, these developments create a self-sustaining ecosystem that not only preserves historical buildings but also empowers the local community to thrive economically, while embracing a more sustainable future.

Gentrification and Affordable Housing

Gentrification is a pressing concern in Boyle Heights, as rising property values threaten to displace long-standing residents and alter the neighborhood's cultural fabric. To counter this, new developments must prioritize **affordable housing** as a core component, ensuring that the existing community can remain and benefit from improvements. By incorporating affordable units and rent-controlled housing, developers can help protect the socio-economic diversity that defines Boyle Heights. Balancing market-rate and affordable housing within new projects is crucial for **preventing displacement**, while preserving the **community's identity and fostering inclusive growth**. Thoughtful urban planning, combined with strong community involvement, is key to addressing gentrification and maintaining the area's cultural heritage.

Design Integration

In Boyle Heights, design integration plays a crucial role in ensuring that new developments **harmonize with the existing urban fabric**. Rather than imposing modern structures that disrupt the neighborhood's character, new designs should **blend seamlessly with the area's architectural styles, scale, and cultural heritage**. This can be achieved by incorporating **local materials, reflecting traditional building techniques, and respecting the neighborhood's historical context**. Thoughtful design integration fosters a sense of continuity, ensuring that new projects enhance the neighborhood rather than alienate it. By aligning with the community's aesthetic and social values, development in Boyle Heights can contribute to its growth while **preserving** the essence of what makes the area unique.

Assemble Chicago

"Assemble Chicago" offers valuable insights into how affordable housing can successfully **integrate with sustainable design**. One of the key lessons from this project is the importance of **incorporating net-zero energy solutions** in urban residential buildings, demonstrating that **sustainability can be achieved without compromising affordability**. Additionally, the mixed-use development approach highlights the significance of creating vibrant community spaces that encourage social interaction and contribute to the local urban fabric. The project underscores the potential of urban infill to revitalize city centers, addressing both **housing shortages** and

environmental goals simultaneously. Studio Gang's design emphasizes the critical role of architecture in promoting environmental responsibility through energy-efficient materials and systems. Ultimately, the project teaches that **fostering community engagement is just as essential as sustainability in affordable housing design**. The takeaway for future projects is the need to strike a balance between **meeting housing demands, creating communal spaces, and advancing sustainability efforts**.



Rendered view from train line



Site Context showing Solar Panels on the green roof



Mixed-Use Amenities



Sustainable Features



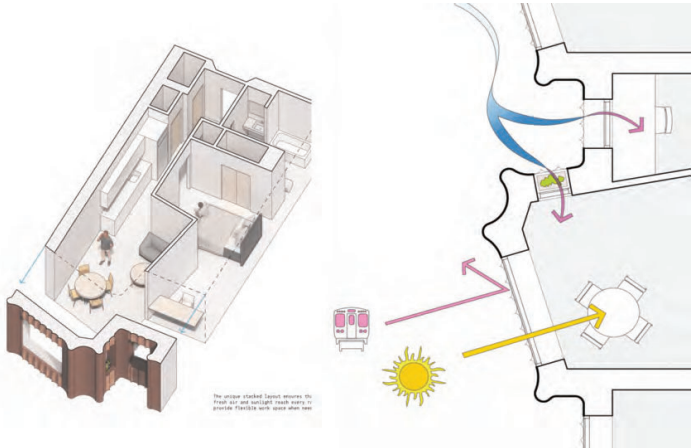
Cross Section

Precedent

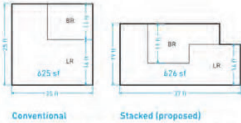
Assemble Chicago



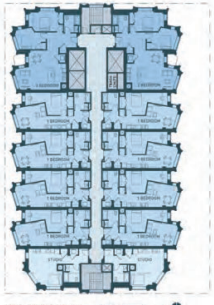
Site Context showing new park layout



Exploded Axo-Diagram of Single bedroom unit

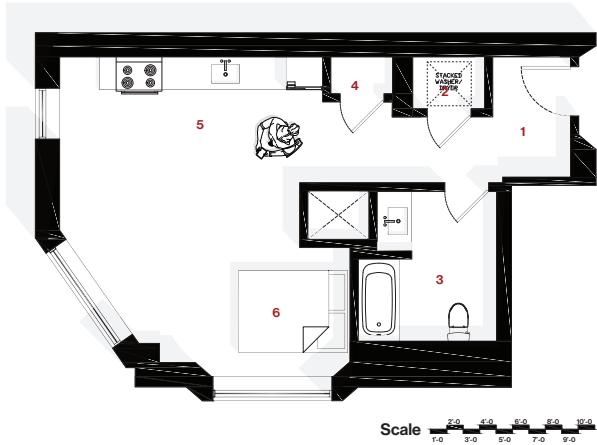


Unit Proportion Diagram showing how the proposed stacked layout will allow for a more efficient layout of units on the given site.



Floorplans

Precedent



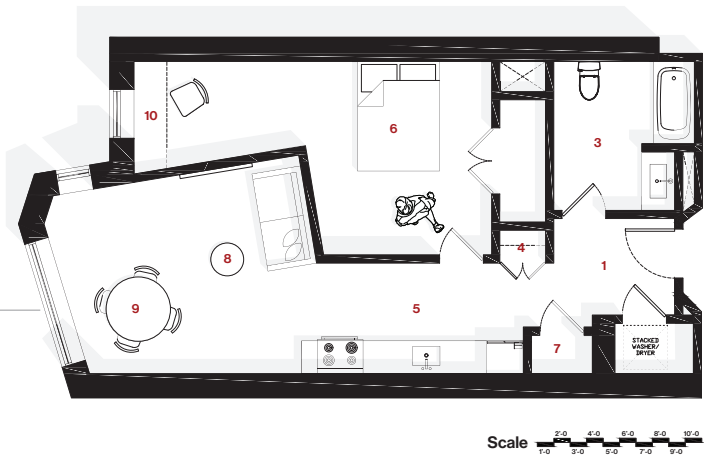
Studio Unit

Bedrooms - 0
Baths - 1

Extras:
Laundry (Washer/Dryer), Accessible
Area: 500 SQFT

Legend

- 1 Foyer
- 2 Laundry
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed



One Bedroom Unit

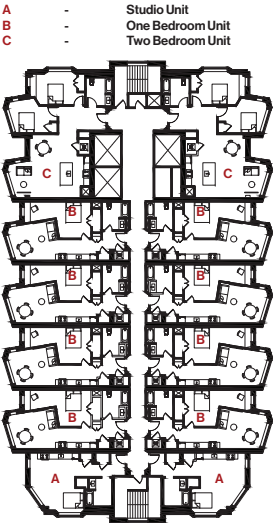
Bedrooms - 1
Baths - 1

Extras:
Laundry (Washer/Dryer),
Accessible, Dining Room, Living
Room, Study
Area: 689 SQFT

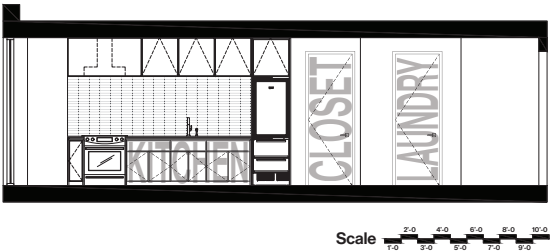
Legend

- 1 Foyer
- 2 Laundry
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed
- 7 Pantry
- 8 Living Room
- 9 Dining Room
- 10 Study

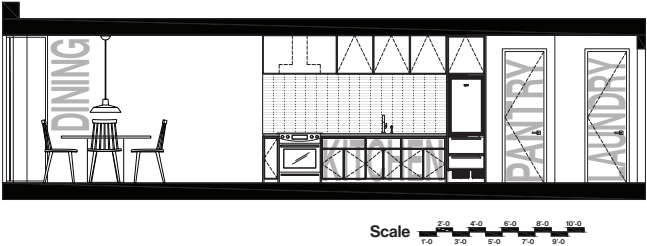
Context



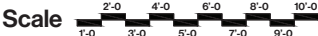
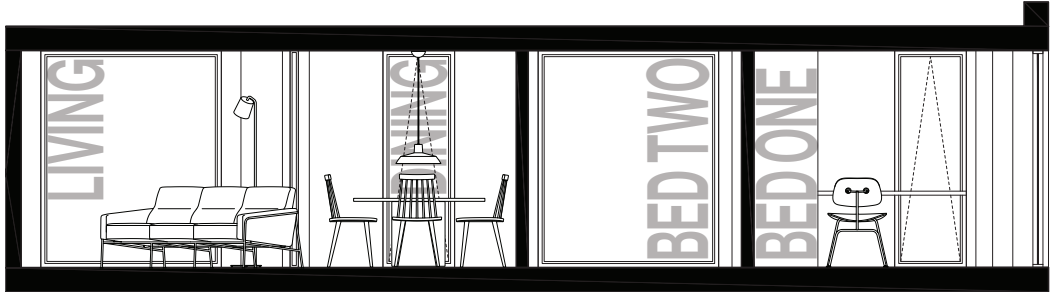
Studio Unit Section



One Bedroom Unit Section



2 Bedroom Unit Section



Two Bedroom Unit

| | |
|------------|---|
| Bedrooms - | 2 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

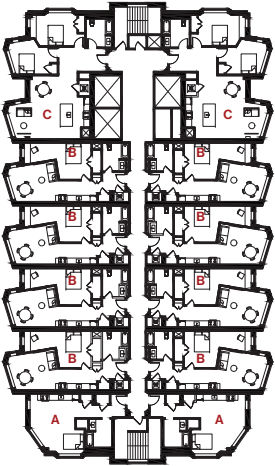
Area: 1060 SQFT

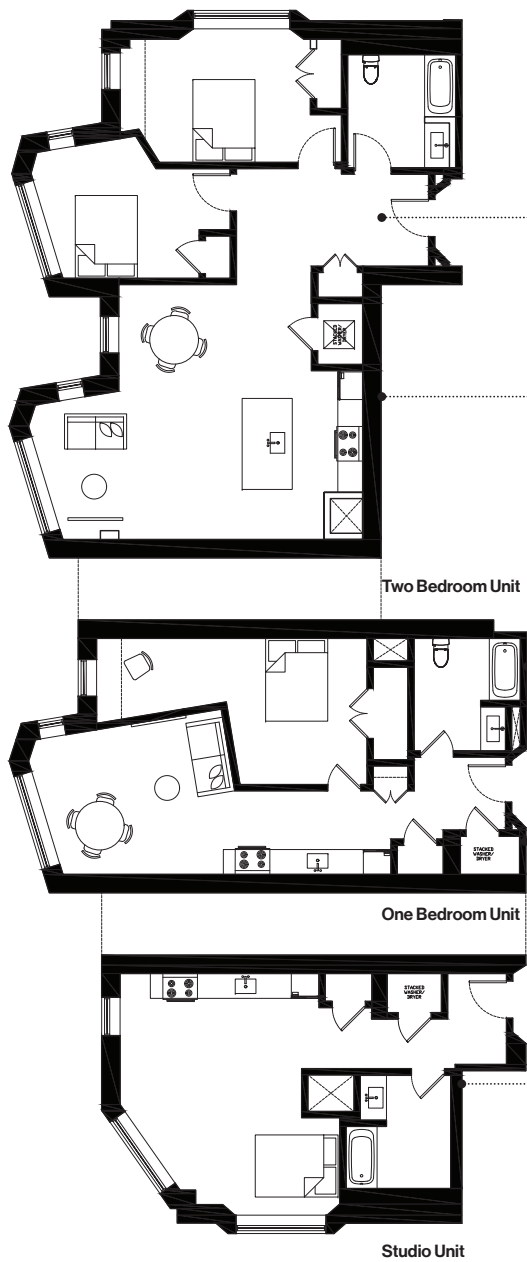
Legend

- 1 Foyer
- 2 Laundry
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed
- 7 Bed 2
- 8 Living Room
- 9 Dining Room
- 10 Study

Context

- A - Studio Unit
- B - One Bedroom Unit
- C - Two Bedroom Unit





The Ramirez Family (Family of Three)

Sofia and Marco, a young couple with one kid, are looking for a more spacious home. This 2-bedroom unit in Boyle Heights is perfect for them, offering an affordable, transit-connected space near their work and cultural roots. The unit's layout provides room for the family to grow, while the nearby parks and local businesses offer a vibrant, community-oriented lifestyle. Living in Boyle Heights allows them to stay connected to their Mexican heritage while giving their children a safe, enriching environment to thrive.



Daniela and Alex (Roommates)

Daniela, a graphic designer, and Alex, a filmmaker, are roommates in their late 20s seeking an affordable yet inspiring place to live. The 2-bedroom unit in Boyle Heights is perfect, offering them personal space, a creative atmosphere, and easy access to public transit. The neighborhood's vibrant arts scene and cultural energy fuel their work, while the affordable rent allows them to focus on their careers without financial stress. This unit gives them the ideal balance of location, community, and creative inspiration.



Isabel (Single Senior)

Isabel, a woman in her late 60s, moves into a 1-bedroom unit in Boyle Heights to downsize and enjoy a simpler life. The cozy space provides her with comfort, easy access to local markets, parks, and cultural events, and proximity to her family. With natural light, a functional kitchen, and a welcoming community, the unit offers Isabel the perfect blend of independence and connection in her new chapter of life.



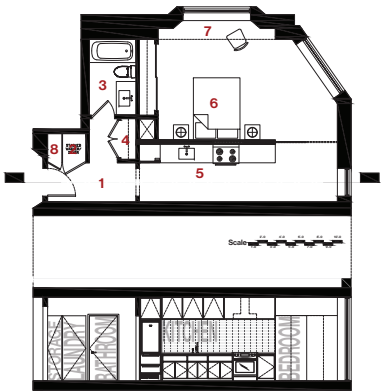
Diego and Sophia (Young Couple)

Diego and Sofia, a young couple in their mid-20s, recently moved into a one-bedroom apartment in Boyle Heights. Diego, a freelance photographer, and Sofia, a bilingual elementary school teacher, are deeply connected to their Mexican-American roots and the neighborhood's rich cultural history. Their cozy apartment in a historic building suits their current lifestyle—no kids and a focus on careers—while also placing them in the heart of a community they love. With its affordability and cultural significance, the unit allows them to immerse themselves in the local art scene and contribute to preserving Boyle Heights' identity amidst gentrification.

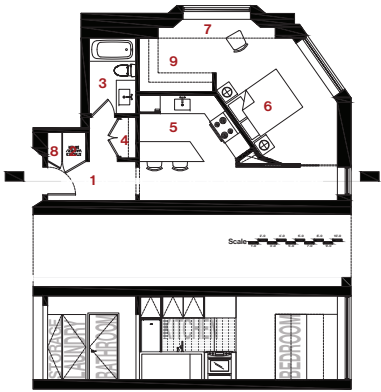


Dylan (Student)

Dylan, a 23-year-old Caucasian college student, recently moved into a modern studio apartment in Boyle Heights. He's studying architecture at a nearby university, balancing his coursework with a growing interest in urban design and community planning. Originally from a suburban area in Northern California, Dylan was drawn to Boyle Heights for its cultural richness and historical context, which align with his studies. His studio apartment is the perfect size for his minimalist needs, providing a peaceful space to focus on his academic work. The neighborhood's diversity and vibrant atmosphere offer him inspiration, while the apartment's affordability allows him to live comfortably as he navigates student life.



Option B



Option C

Studio Unit

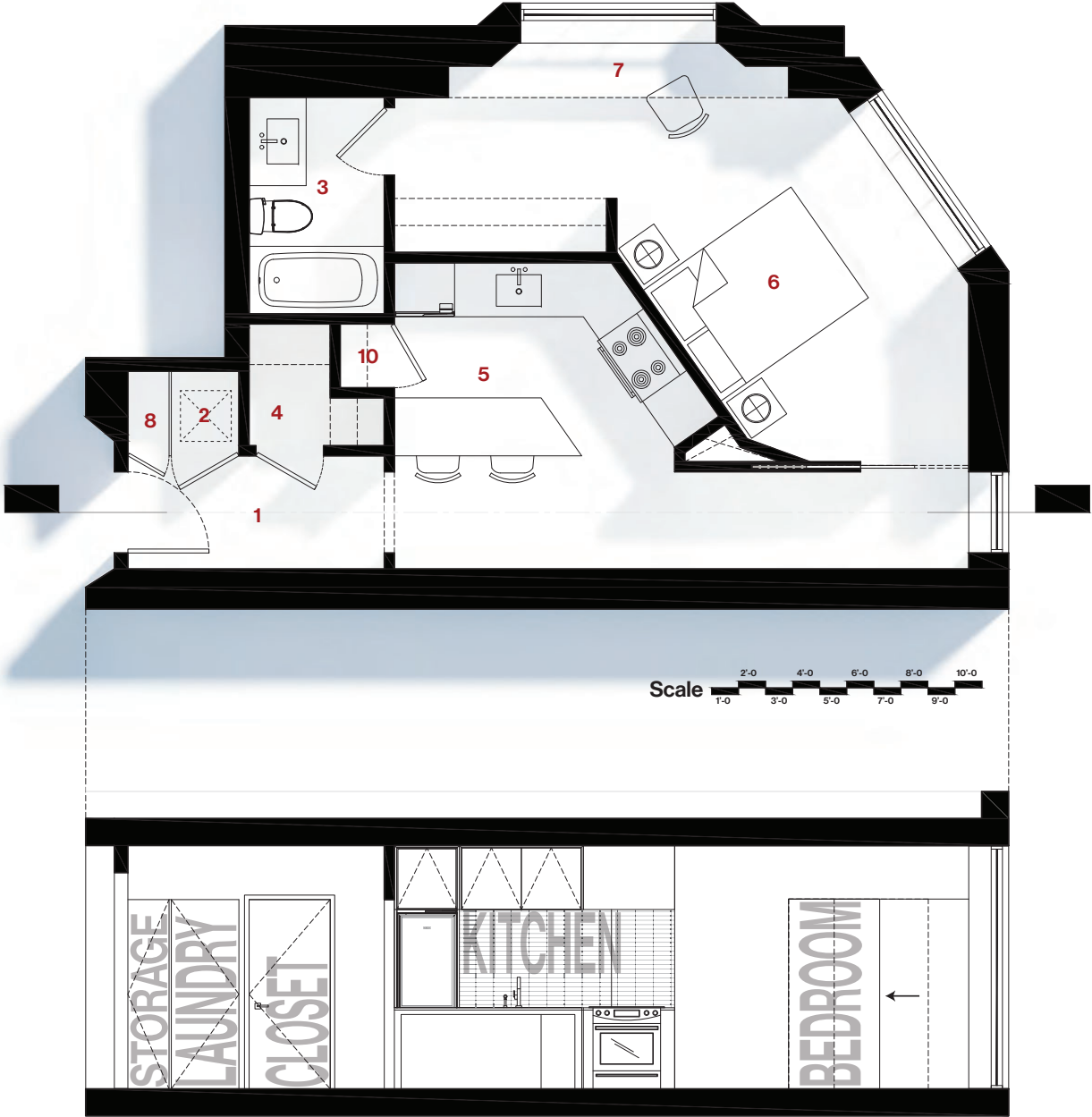
Bedrooms - 1
Baths - 1

Extras:

Laundry (Washer/Dryer), Accessible

Area: 500 SQFT

- Legend**
- 1 Foyer
 - 2 Laundry
 - 3 Bathroom
 - 4 Closet
 - 5 Kitchen
 - 6 Bed
 - 7 Study
 - 8 Storage
 - 9 Walk-In Closet
 - 10 Pantry



Section

One Bedroom Unit

Bedrooms - 1
Baths - 1

Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

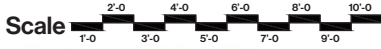
Area: 689 SQFT

Legend

- 1 Foyer
- 2 Laundry
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed
- 7 Study
- 8 Storage
- 9 Living Room
- 10 Pantry



Section



Two Bedroom Unit

Bedrooms - 2
Baths - 1

Extras:

Laundry (Washer/Dryer),
Accessible, Dining Room, Living
Room, Study

Area: 1060 SQFT

Legend

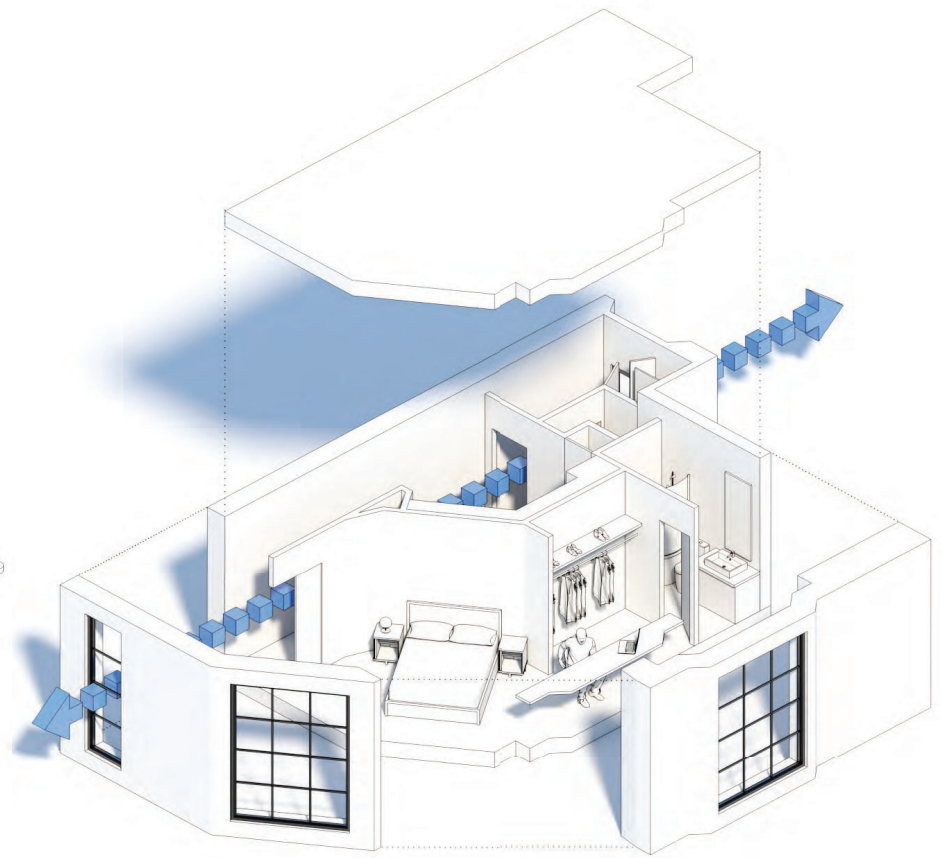
- 1 Foyer
- 2 Laundry
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed
- 7 Bed2
- 8 Living Room
- 9 Dining Room
- 10 Study



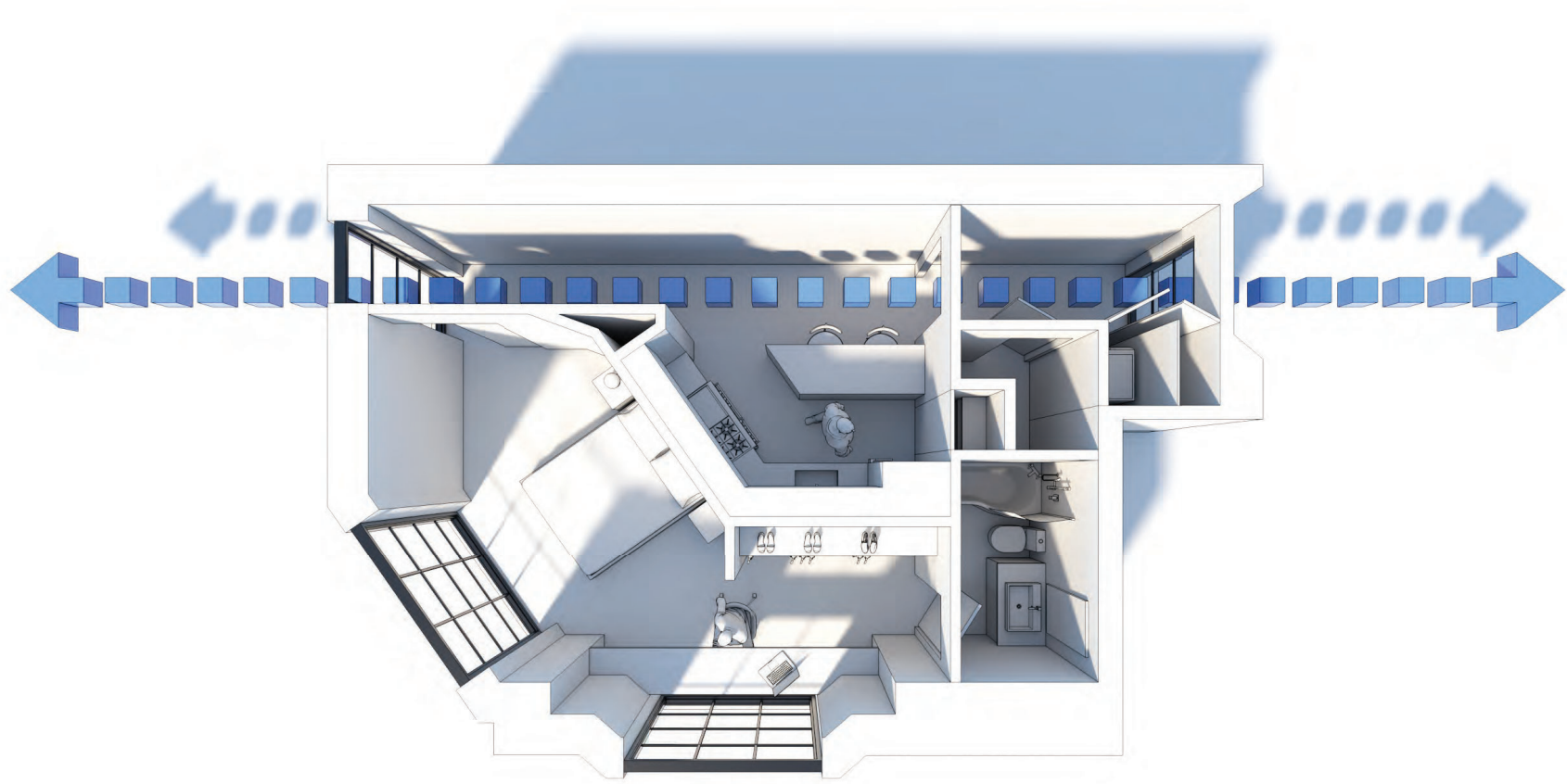
Section



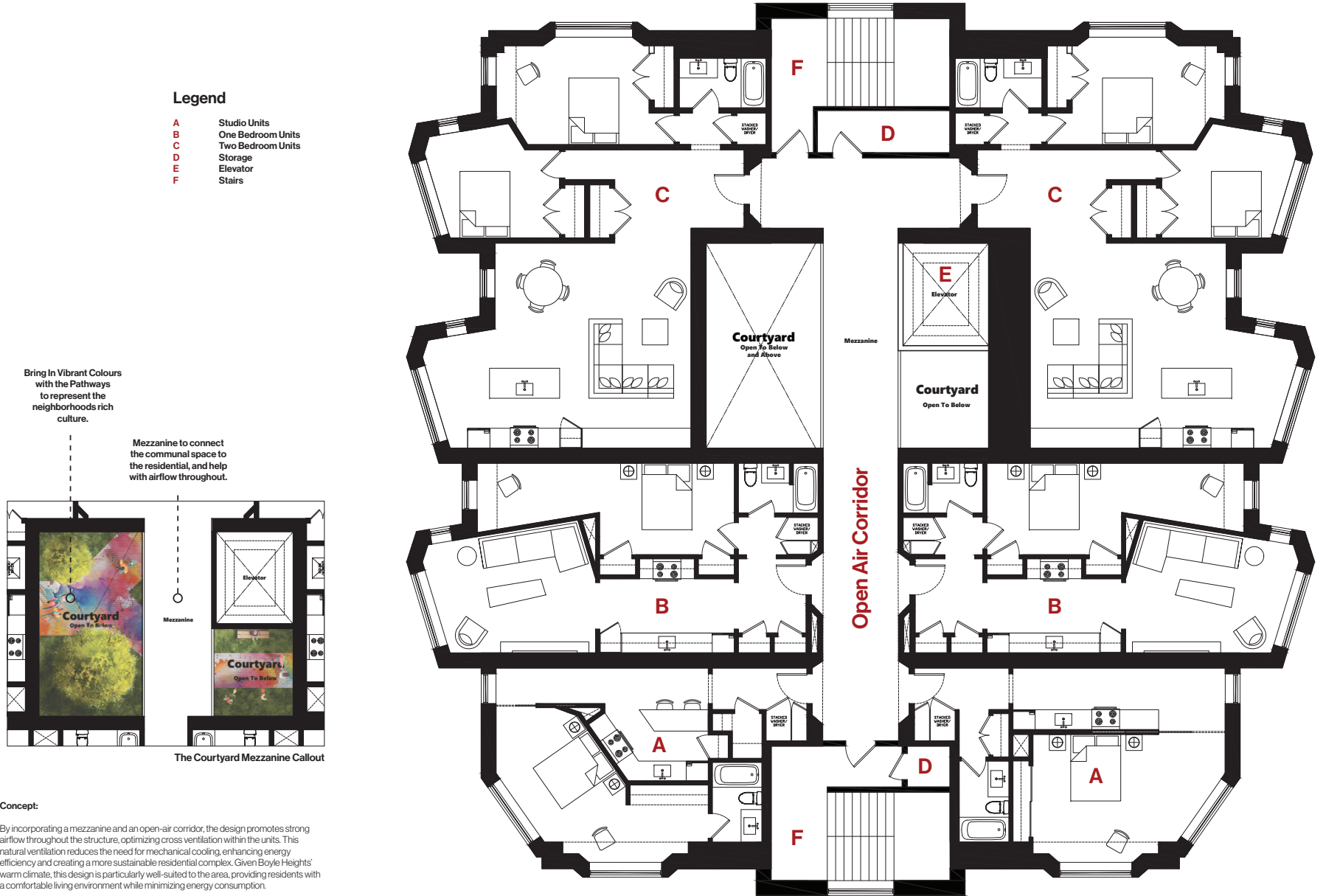
Studio Unit Axo Diagram



Studio Unit Exploded Axo Diagram



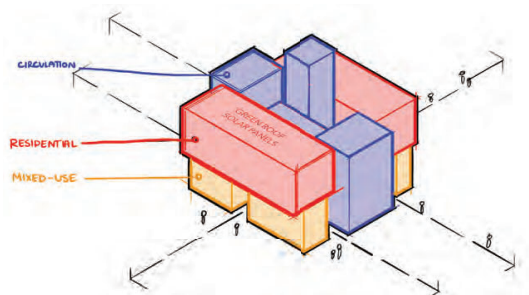
Cross Ventilation Diagram



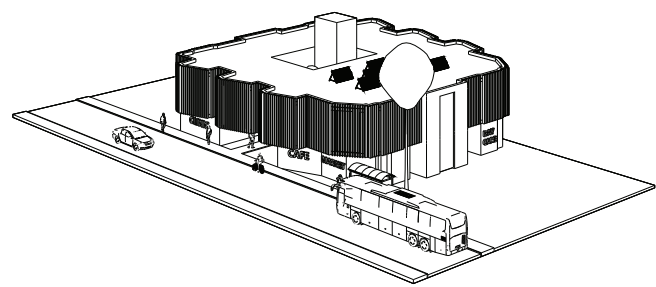
Concept:

By incorporating a mezzanine and an open-air corridor, the design promotes strong airflow throughout the structure, optimizing cross ventilation within the units. This natural ventilation reduces the need for mechanical cooling, enhancing energy efficiency and creating a more sustainable residential complex. Given Boyle Heights' warm climate, this design is particularly well-suited to the area, providing residents with a comfortable living environment while minimizing energy consumption.

Conceptual Second Floor Assembly



Program Diagram



Concept Axo



Massing Axo Render

Takeaways

Social and Cultural Values

For an infill project to succeed, it must align with the social and cultural values of the existing neighborhood. Boyle Heights is known for its strong community ties, and any new development should prioritize the preservation of this identity. Gentrification concerns highlight the need for a balance between new developments and community preservation.

Implementation: Conduct thorough community consultations to ensure development plans align with local values, and prioritize maintaining cultural identity in all stages of the project, and ensure that the project respects their values.

Mixed Use and Sustainable Design

Sustainability is essential for long-term viability, especially in urban infill projects. Features such as green roofs, energy-efficient materials, and enhanced public transit can reduce environmental impact and improve livability. Mixed-use spaces not only contribute to sustainability but also provide opportunities for local businesses and residents, helping the community generate income and maintain revitalized areas.

Implementation: Develop mixed-use spaces that incorporate sustainable design, creating a balance between economic growth and environmental responsibility.

Design Integration

Design integration is key to preserving the harmony of the neighborhood. New developments should seamlessly blend with the existing urban fabric, using local materials and traditional architectural styles to create cohesion. This respectful approach ensures that the neighborhood's history and culture are preserved while allowing for modern growth.

Implementation: Focus on integrating new structures with the architectural character of Boyle Heights, using local design elements to maintain continuity.

Community Identity + Cultural Heritage

Preserving Boyle Heights' rich cultural heritage is crucial for any new development. This involves not only maintaining historic architecture but also safeguarding the community's identity. New projects should incorporate materials, scale, and design elements that respect the local character, ensuring that developments enhance the area rather than disrupt it.

Implementation: Engage in meaningful community consultation and collaborate with local leaders to ensure design choices reflect the cultural values of Boyle Heights. Include elements that relate back to the history of the area and go along with its values.

Gentrification and Affordable Housing

Gentrification poses a real threat to Boyle Heights, as rising property values risk displacing long-term residents. To address this, new developments must prioritize affordable housing to protect socio-economic diversity. Ensuring a mix of market-rate and affordable housing can help maintain the community's identity while providing opportunities for inclusive growth.

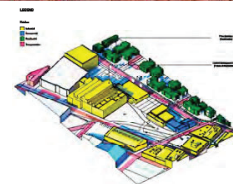
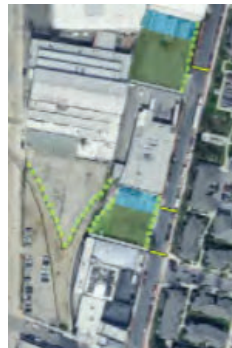
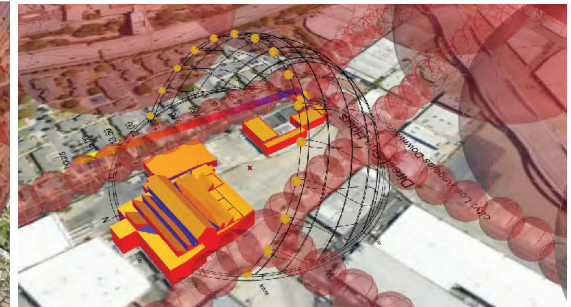
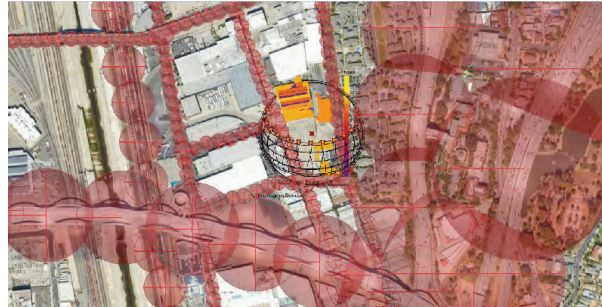
Implementation: Make affordable housing a central aspect of development to counter displacement and protect the neighborhood's long-standing residents.

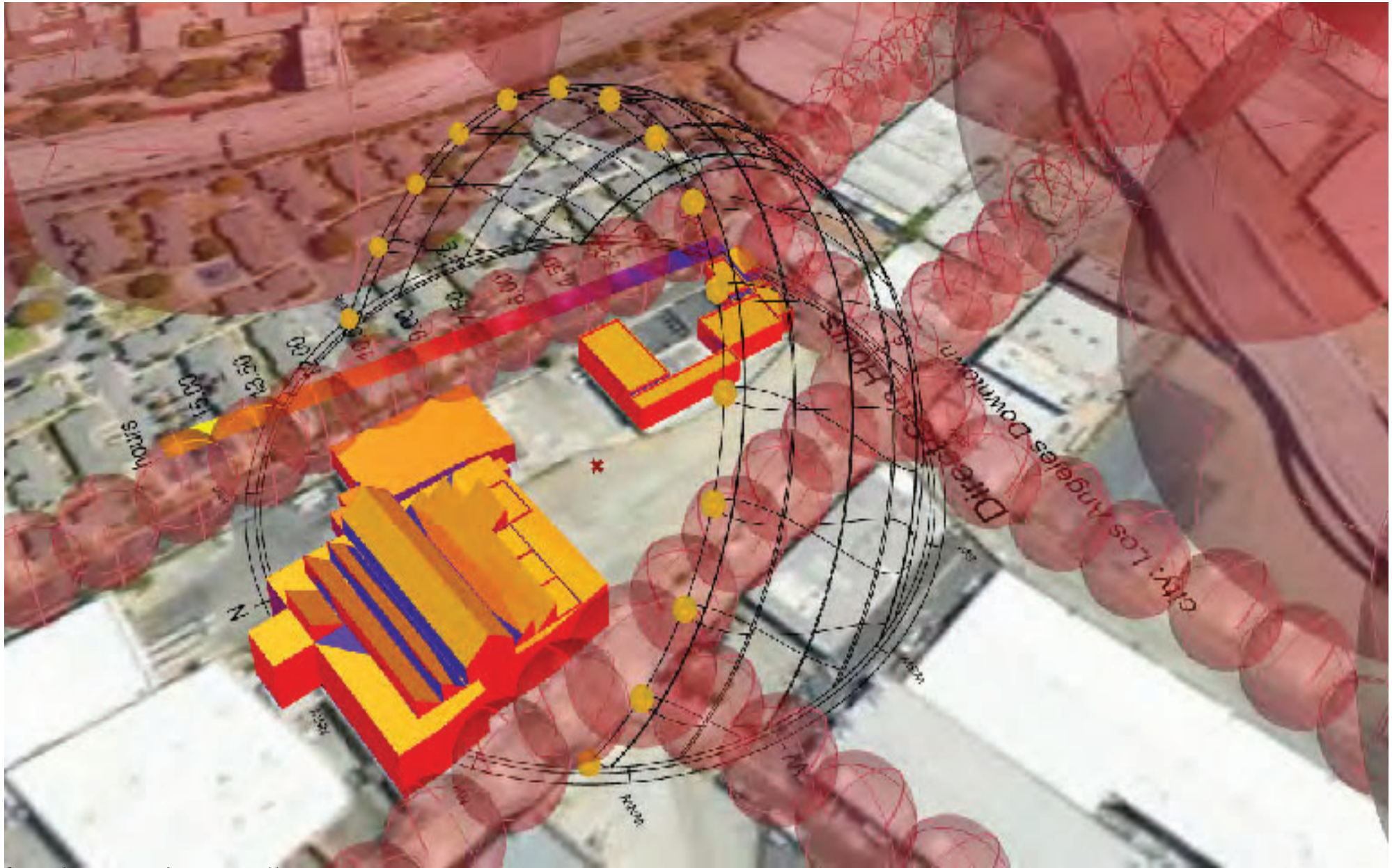
Conclusion

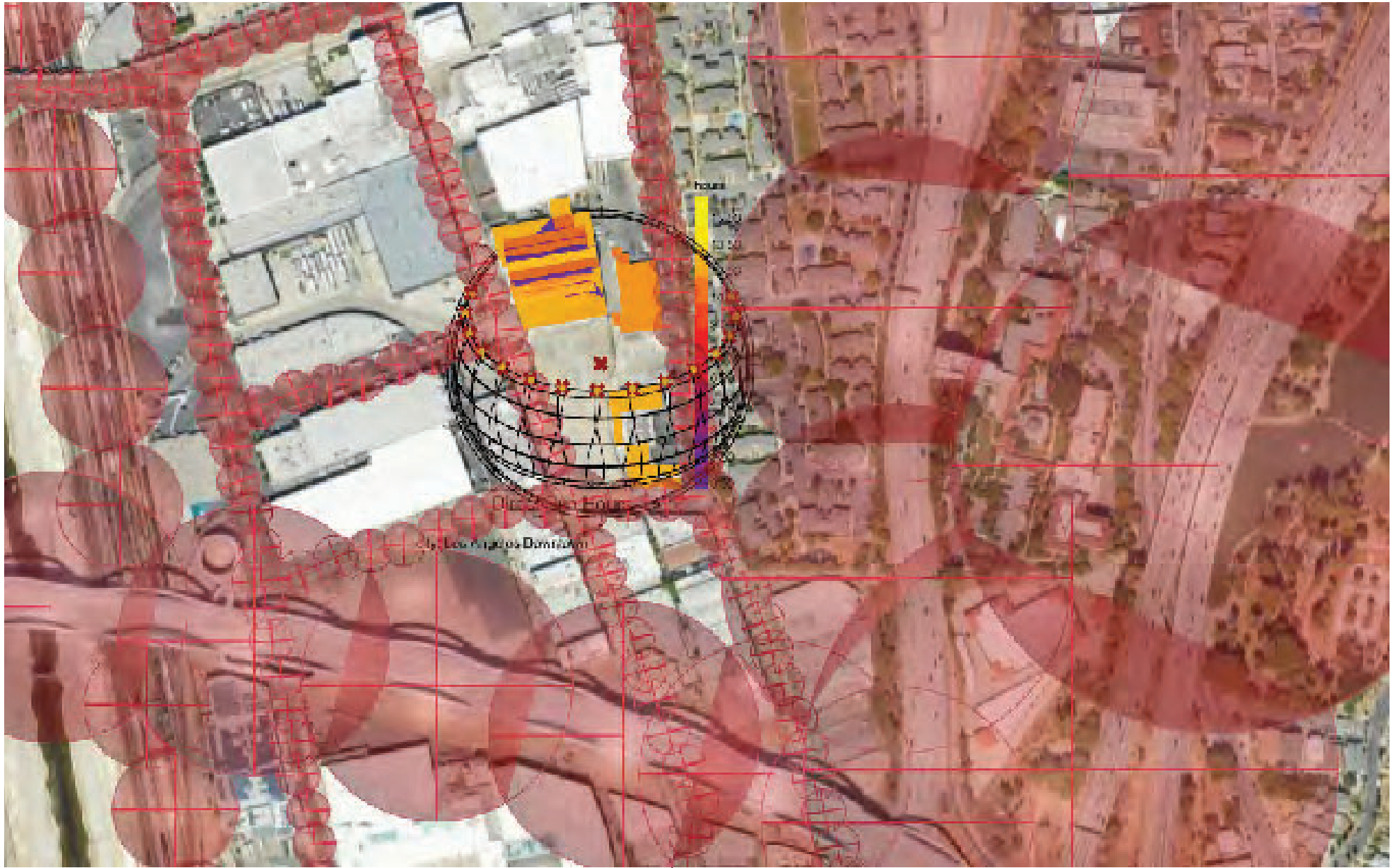
In conclusion, development in Boyle Heights must prioritize the preservation of its unique cultural heritage and community identity. Meaningful community engagement is key to ensuring new projects respect local values and enhance, rather than disrupt, the neighborhood. A focus on sustainable, mixed-use spaces can promote economic vitality while addressing environmental concerns. However, to counteract the threat of gentrification, affordable housing should be central to development strategies, ensuring long-term residents are not displaced. Finally, design integration that respects the neighborhood's architectural character will allow for thoughtful growth that honors Boyle Heights' rich history and vibrant culture.

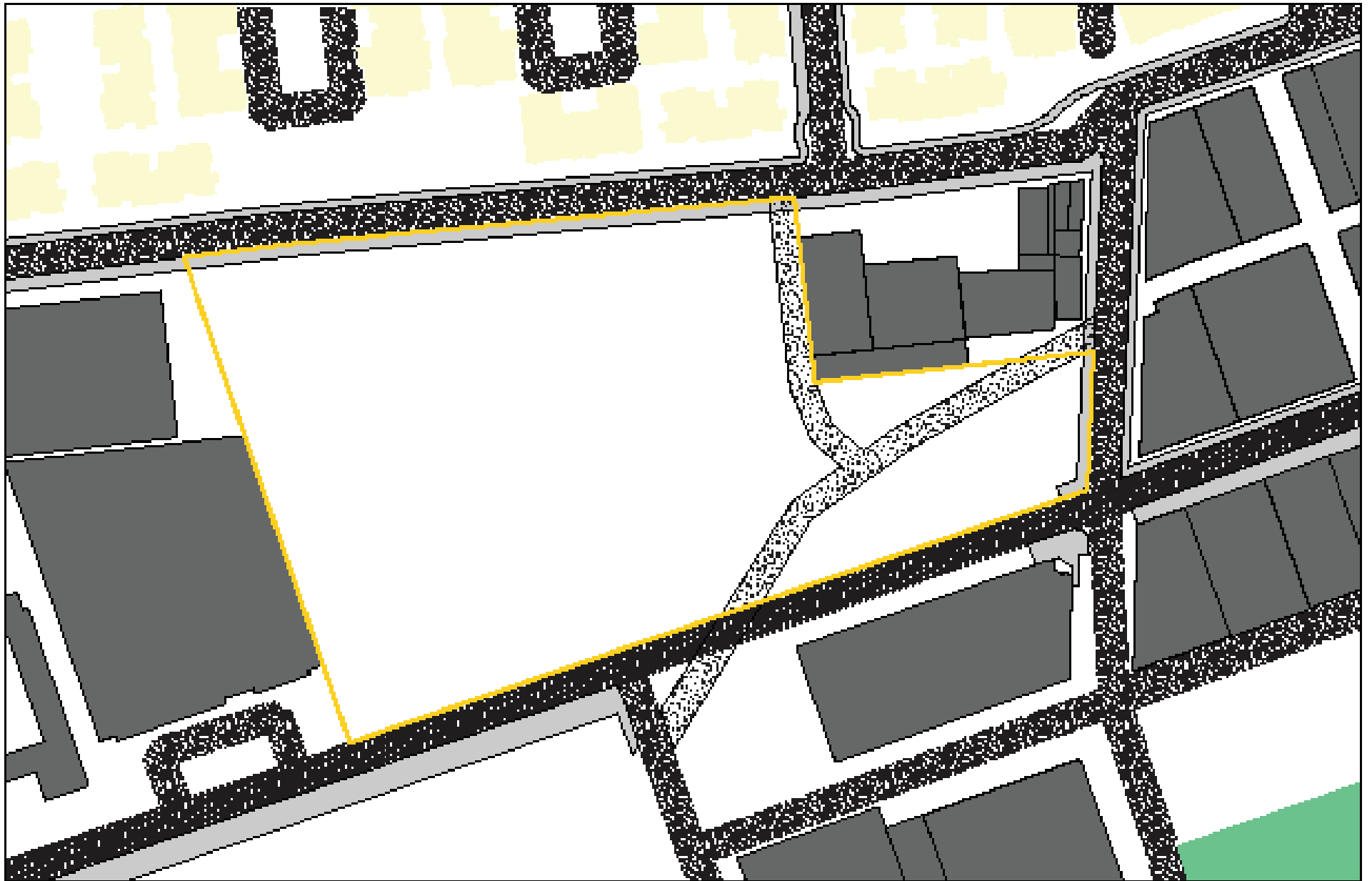
Contents

- Neighborhood Isometric
- Sound and Light Studies
- Model Base Drawing
- Parcle Figure Ground Options
- Site
- Land Use
- Parks and Green Space
- Wall Art









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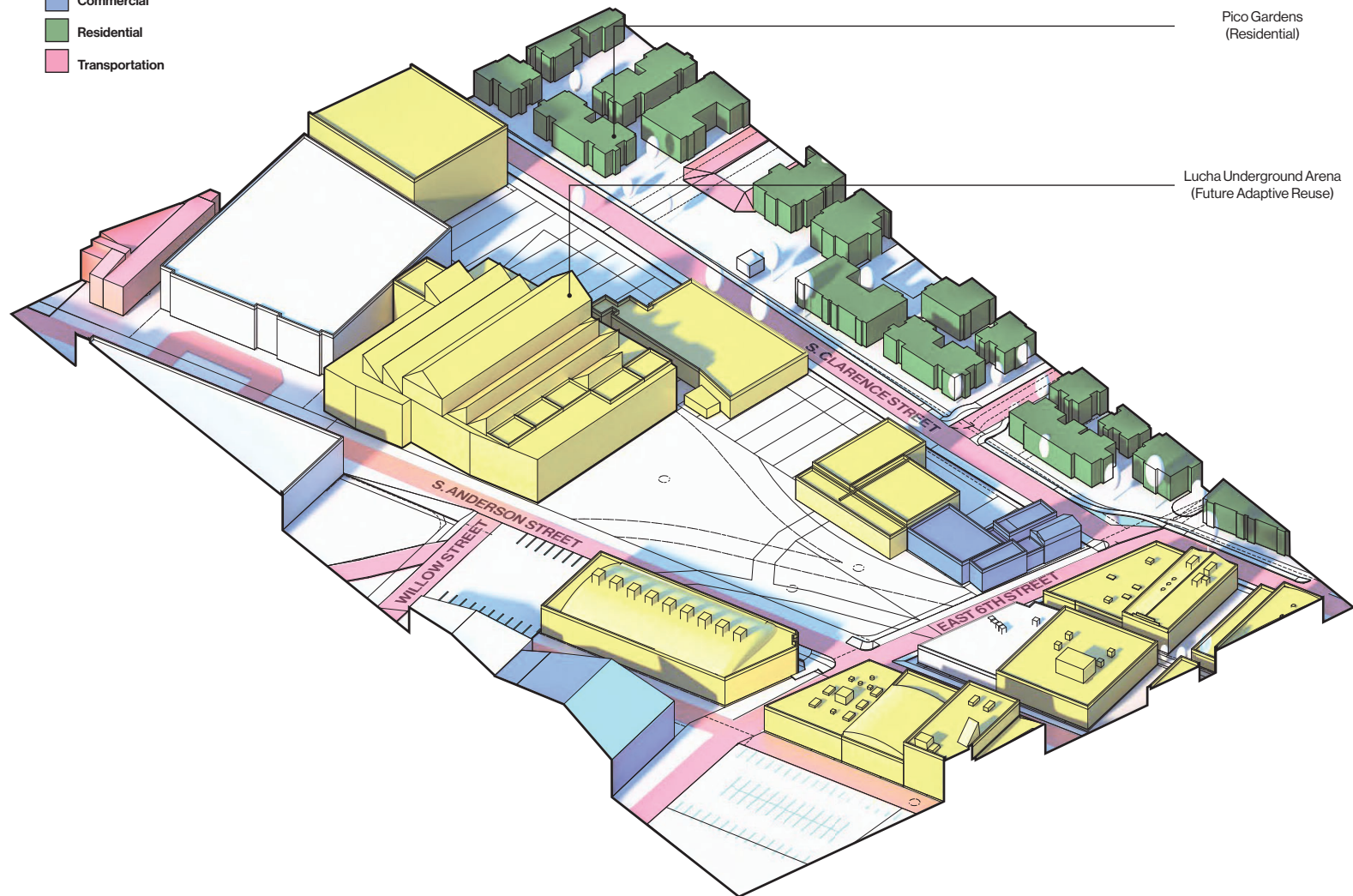
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LEGEND

Hatches:

- Industrial
- Commercial
- Residential
- Transportation



Pico Gardens
(Residential)

Lucha Underground Arena
(Future Adaptive Reuse)





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EXISTING WALL ART



EXISTING WALL ART



EXISTING WALL ART



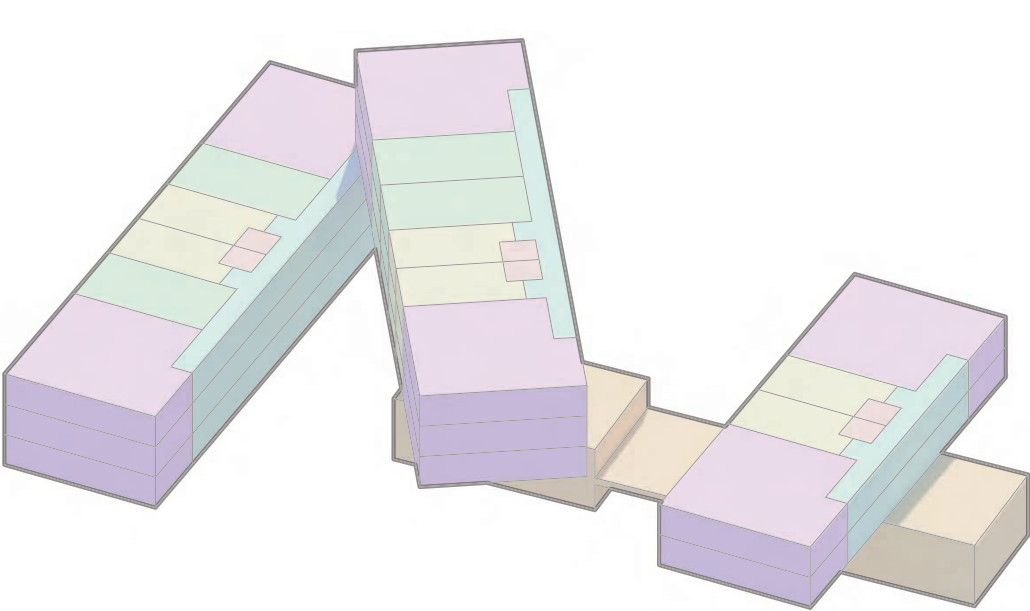
PROPOSED WALL ART

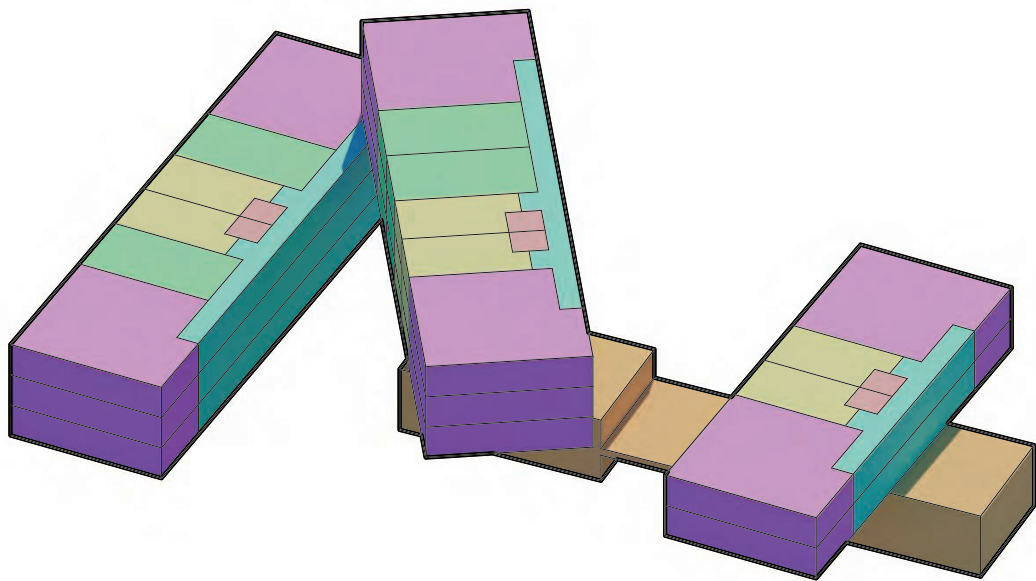




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| Physical Model | |
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| Sections | |
| Section Diagram | 7 |
| Floorplans | |
| Floorpan Concept | 8 |





Public Spaces = (Medical Clinics + Markets + Cafe's)



Horizontal Circulation Spaces



One Bedroom Units (700 sqft) = (Bedroom + Kitchen + Bathroom + Living) x 12 = 8400 sqft



Vertical Circulation = (Stairs + Elevators)

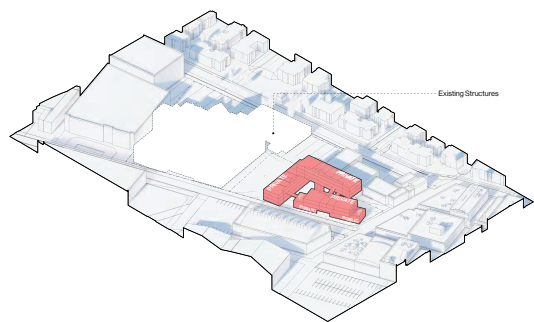


Studio Units (600 sqft) = (Bed/Living + Kitchen + Bathroom) x 16 = 9600 sqft



Two Bedroom Units (1300 sqft) = (Bed (2) + Living + Dining + Kitchen + Bathroom) x 16 = 20800 sqft

Private = Total Units = Two Bedroom (16) + One Bedroom (12) + Studio (16) = **44 Units**
Private = Total Sqft = Two Bedroom (20800) + One Bedroom (8400) + Studio(9600) = **38800 sqft**
Public = Total Sqft = (Medical Clinics + Markets + Cafe's) = **4880 sqft**

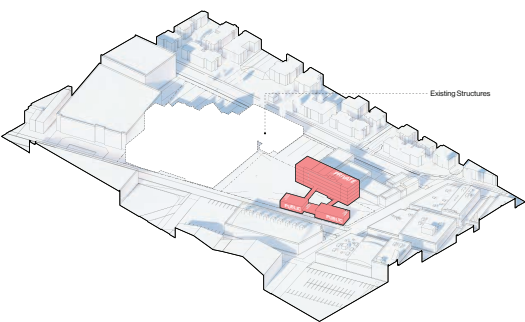


Massing One (Central Courtyard + Elevated Paths)

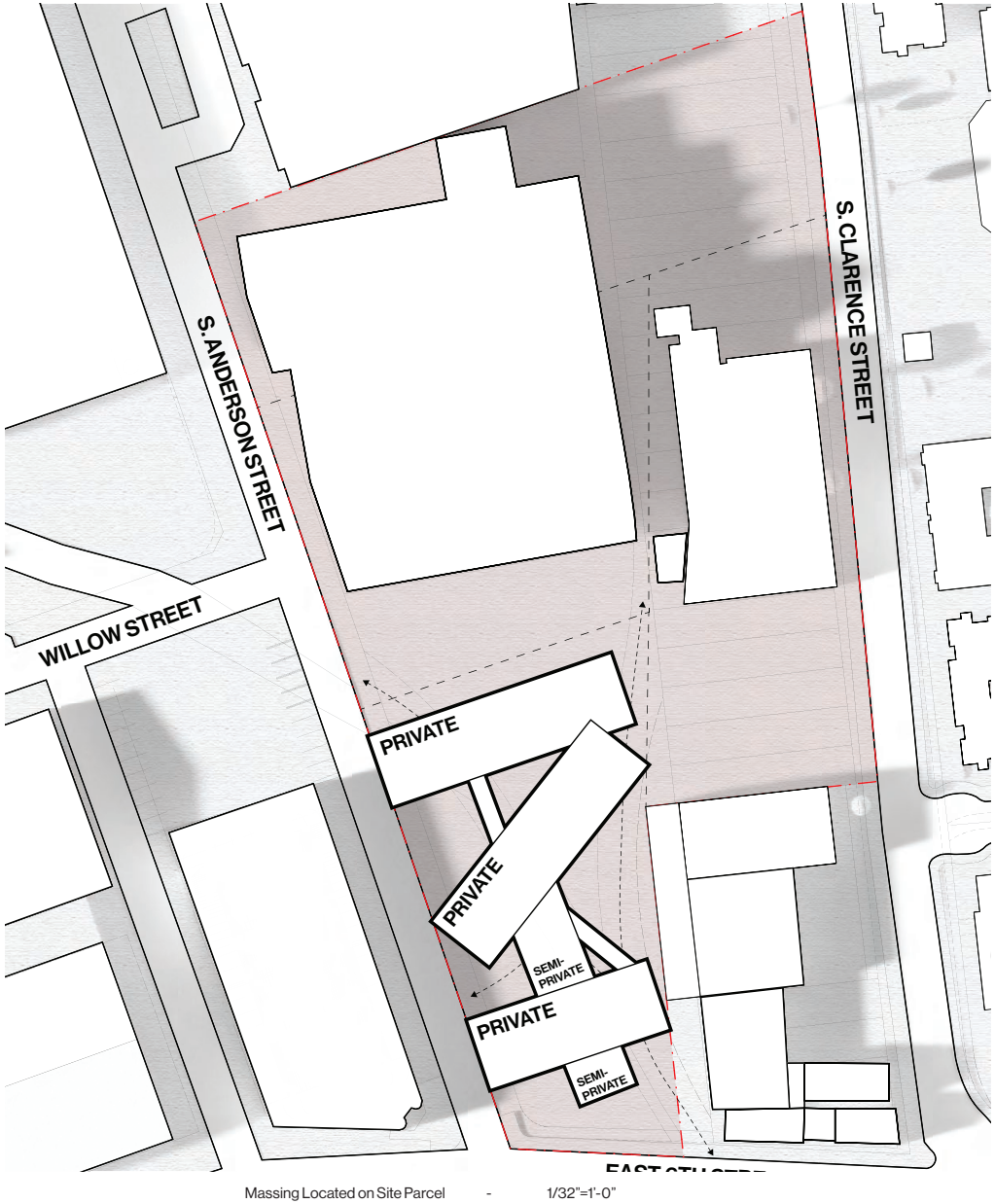


Massing Two (Prioritizing Access to Outdoor Areas + Rooftop Amenities)

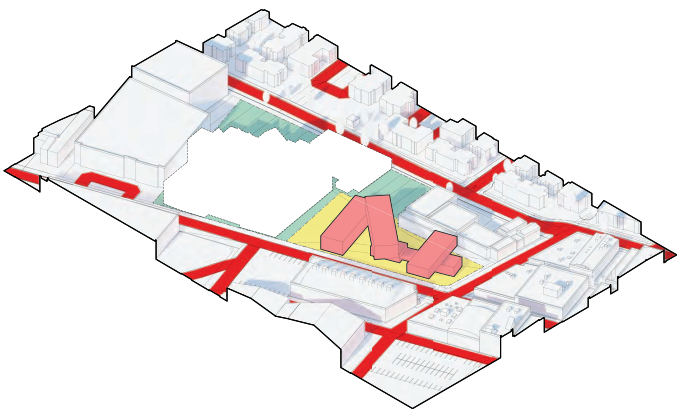
Massing Chosen For Development



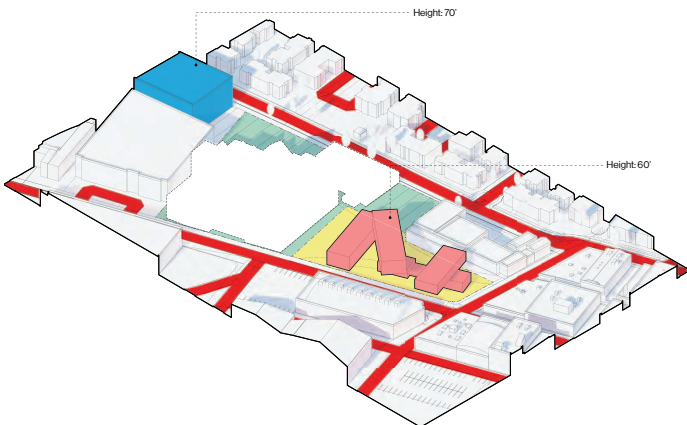
Massing Three (Minimal Footprint)



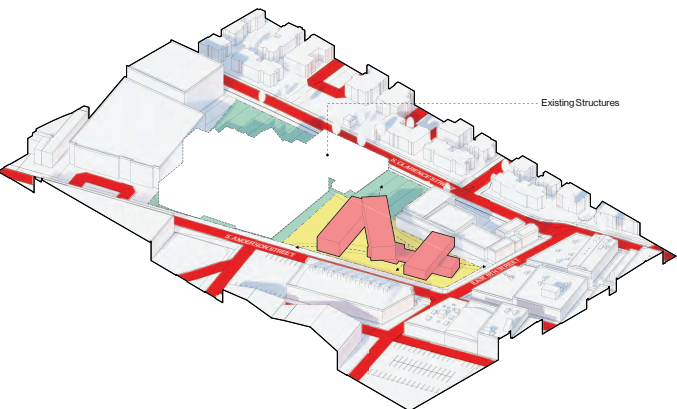
Massing Located on Site Parcel - 1/32"=1'-0"



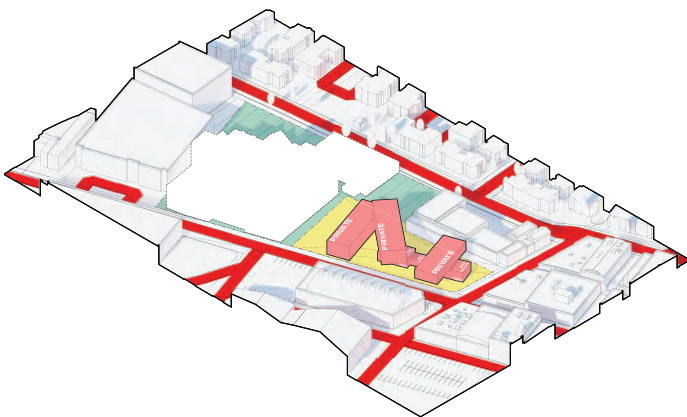
Parcel Layout



Height Relations

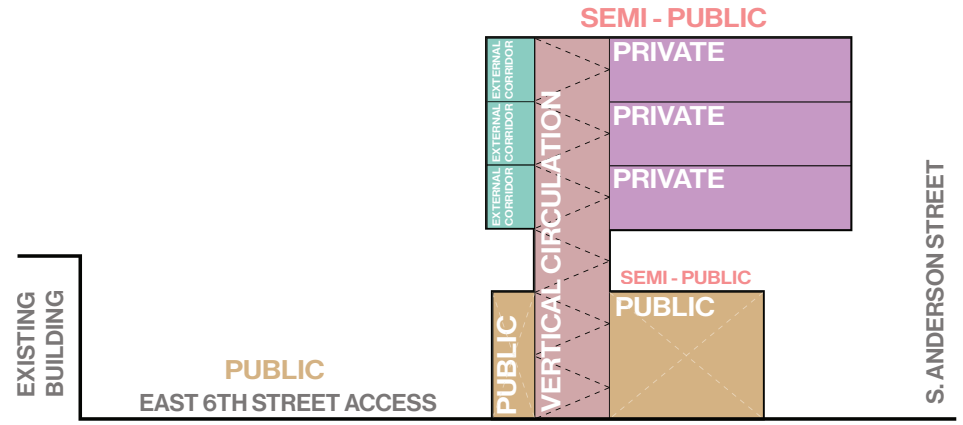
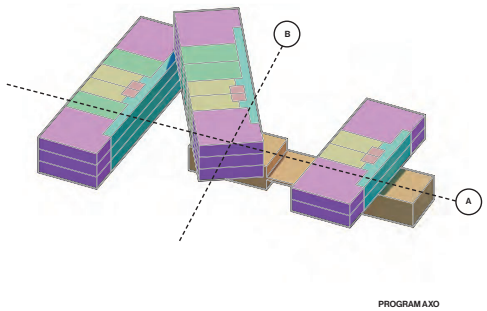
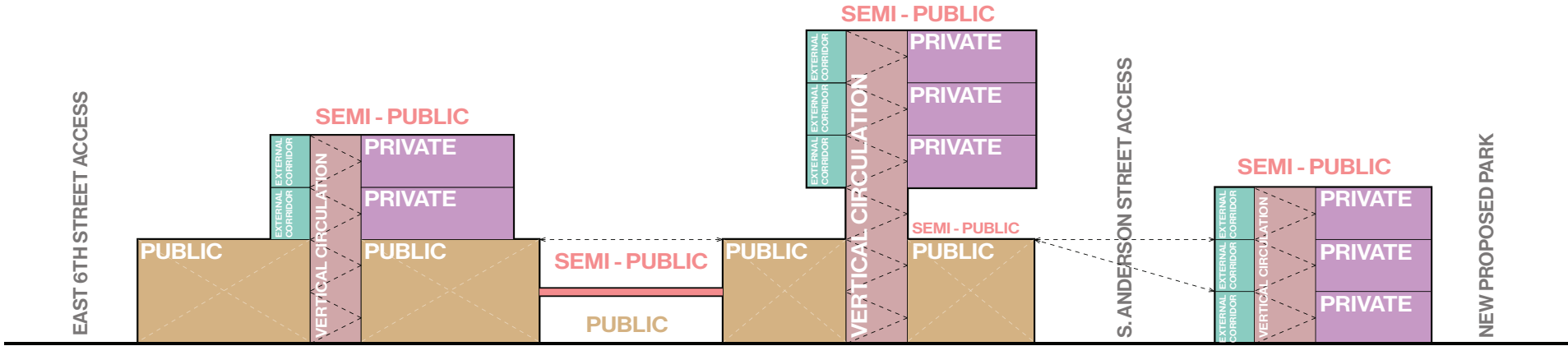


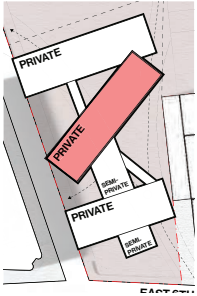
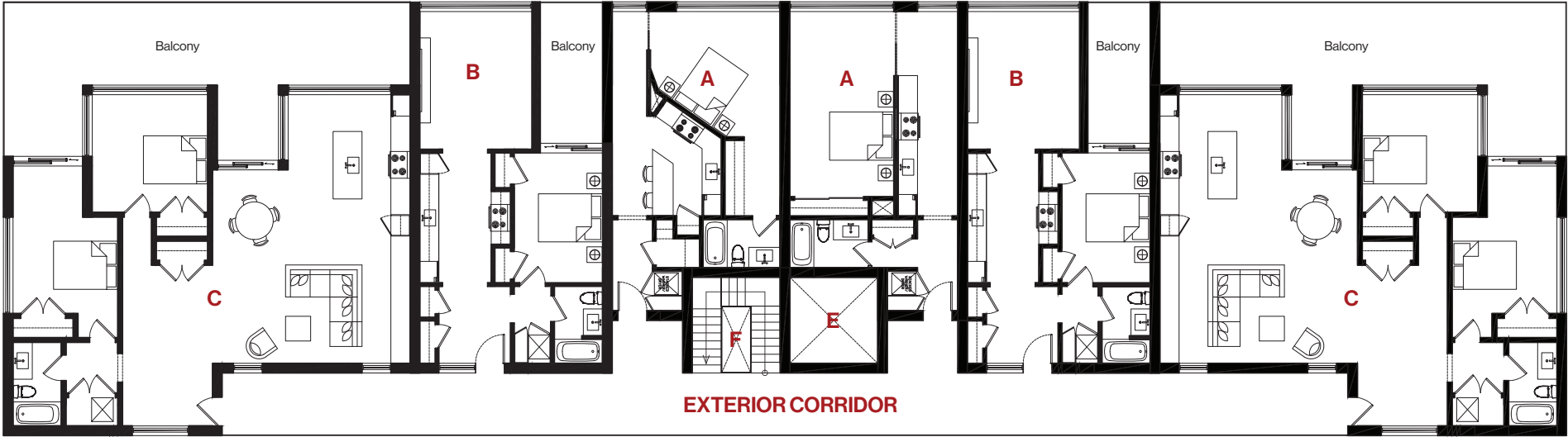
Site Access



Private to Public Relations







- Typical Plan Layout**
- Legend**
- A Studio Units
 - B One Bedroom Units
 - C Two Bedroom Units
 - D Storage
 - E Elevator
 - F Stairs

ParkLife *Melbourne, Australia*



Shot of the circulation spaces

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| Key Lessons and Takeaways | |
| Conclusion | 10 |



Mailboxes

Introduction



Site Context Diagram

Project Stats

Completed In: 2022
Location: Melbourne, Australia
Site Area: 706 SQM
Units: 37 Residential (14 one-bedroom, 19 two-bedroom, 2 three-bedroom, 2 Teilhaus), and 2 commercial spaces
Architects: Austin-Maynard Architects

Purpose

Residential Extension

The project is a compact addition to an existing home, providing extra living space for the owners without significantly expanding the home's footprint.

Sustainable Living

The design emphasizes sustainability and energy efficiency. It incorporates passive solar principles, natural ventilation, and rainwater harvesting to minimize energy consumption and environmental impact. The use of durable, eco-friendly materials also supports long-term sustainability.

Connection to Nature

Located near a park, the project prioritizes the connection between indoor and outdoor spaces. Large windows and thoughtful orientation provide views of the surrounding greenery, fostering a sense of integration with nature.

Enhancing Well-being

By providing a serene and well-lit environment connected to nature, the design promotes the mental and physical well-being of its occupants.

References:

Parklife. Austin Maynard Architects. (n.d.). <https://maynardarchitects.com/parklife-by-austin-maynard-architects>

Introduction



Exterior Facade Shot

References:

Parklife. Austin Maynard Architects. (n.d.). <https://maynardarchitects.com/parklife-by-austin-maynard-architects>

Project Overview

Design Concept

- Open-plan layout emphasizing natural light and ventilation.
- Seamless indoor-outdoor connection.
- Focus on energy efficiency and reducing reliance on artificial systems.

Sustainability

- Passive design: north-facing windows, cross ventilation, insulation.
- Solar panels, water-saving fixtures, recycled materials.
- Minimal environmental footprint while maintaining comfort.

Materials and Aesthetics

- Modern, minimalist design with extensive use of timber.
- Warm, inviting feel with large windows framing views of greenery.

Community & Urban Connection

- Visual and functional link to nearby Edinburgh Gardens.
- Integrates private and public spaces, enhancing community engagement.
- Promotes sustainable urban living.

References:

Parklife. Austin Maynard Architects. (n.d.). <https://maynardarchitects.com/parklife-by-austin-maynard-architects>



Site Context Diagram

Sustainability

Sustainability Stats

Indoor Environment Quality

- Natural ventilation with energy recovery ventilators (ERVs) for fresh air.
- Low-VOC and low-formaldehyde materials.
- Focus on thermal comfort with ceiling fans and insulation.
- Daylight modeling ensures good natural light in living areas and bedrooms.

Energy Efficiency

- Average NatHERS rating of 9.0 stars.
- Insulation and high-performance glazing throughout.
- North-facing apartments utilize thermal mass.
- High air-tightness achieved (2.3 m³/hr/m² @50Pa).
- ERVs, cool misting sprays, and energy-saving appliances installed.
- LED lighting, master switch for appliance control, and communal clothes drying options.

100% Fossil Fuel-Free

- All-electric building: no gas.
- Induction cooktops, electric BBQ, heat pump for hot water.
- 28.8kW solar PV system with 100% green electricity.

Community & Urban Connection

- Visual and functional link to nearby Edinburgh Gardens.
- Integrates private and public spaces, enhancing community engagement.
- Promotes sustainable urban living.

Water Efficiency

- High-efficiency fixtures and appliances.
- 20,000L rainwater collection system.
- Water-sensitive landscaping.

Stormwater Management

- Drainage design reduces stormwater runoff.
- Improved stormwater quality through landscaping and rainwater tanks.

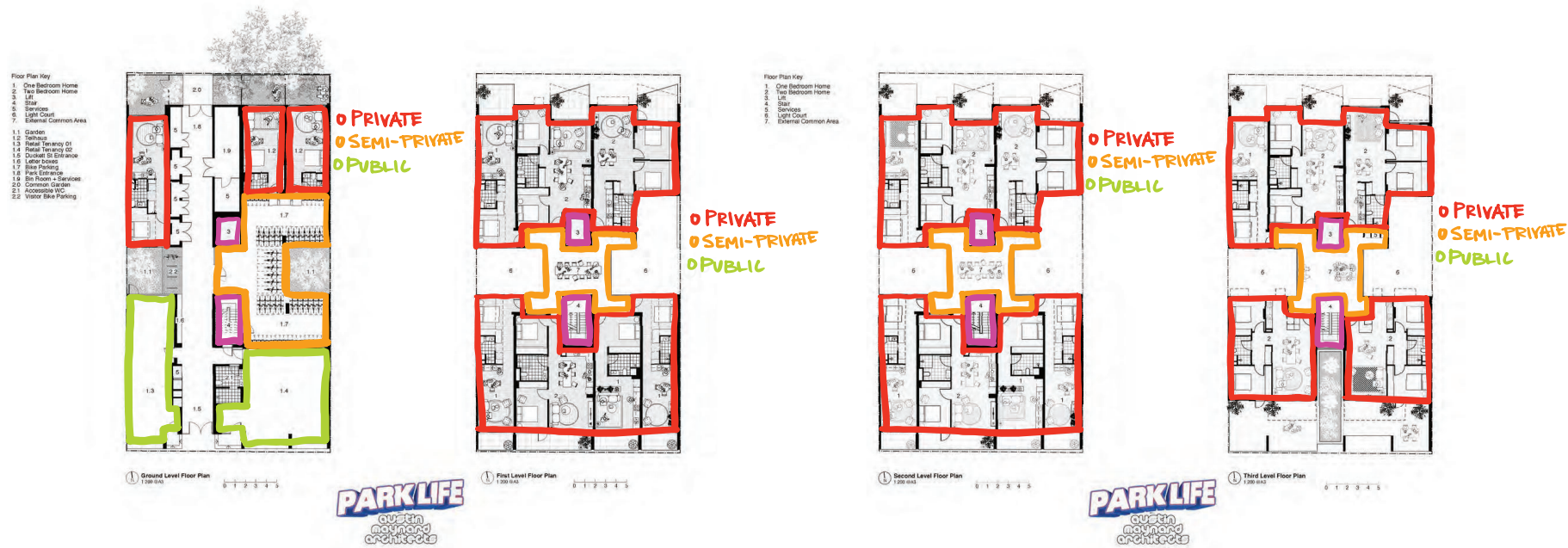
Building Materials

- Recyclable materials and FSC-approved timber.
- Responsibly sourced steel (WSACAP).
- Best practice-certified PVC.
- Durable, sustainable materials used throughout.

References:

designboom, kat barandy I. (2021, June 17). Toward a carbon neutral city: Studio gang unveils its clean, low-income "assemble Chicago." <https://www.designboom.com/architecture/studio-jeanne-gang-assemble-chicago-clean-carbon-neutral-low-income-residential-06-16-2021/>
 Bacap. (2021, September 29). Assemble chicago: Envisioning a net zero apartment building in Chicago's loop. Bala Arena Capital. <https://balaarenacapital.com/2021/09/29/assemble-chicago-envisioning-a-net-zero-apartment-building-in-chicago-loop/>

FLOORPLANS

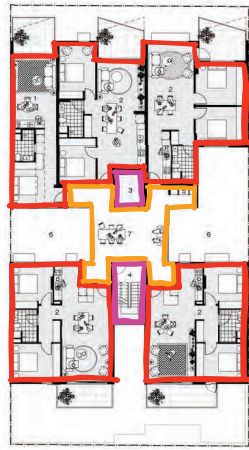


References:

Parklife. Austin Maynard Architects. (n.d.). <https://maynardarchitects.com/parklife-by-austin-maynard-architects>

FLOORPLANS

- Floor Plan Key
1. One Bedroom Home
2. Two Bedroom Home
3. Lift
4. Stair
5. Services
6. Lift Court
7. External Corridor Area
8. Two Bedroom Duplex
9. Three Bedroom Duplex



④ Fourth Level Floor Plan
1:500 (A4)

PARKLIFE
austin
maynard
architects

○ PRIVATE
○ SEMI-PRIVATE
○ PUBLIC



⑤ Fifth Level Floor Plan
1:500 (A4)

○ PRIVATE
○ SEMI-PRIVATE
○ PUBLIC

- Floor Plan Key
1. One Bedroom Home
2. Two Bedroom Home
3. Lift
4. Stair
5. Services
6. Lift Court
7. External Corridor Area
8. Two Bedroom Duplex
9. Three Bedroom Duplex
7.1. Hanging Area
7.2. Communal Area
7.3. Laundry/Workshop
7.4. Productive Gardens
7.5. BBQ
7.6. Amphitheatre



⑥ Sixth Level Floor Plan
1:500 (A4)

PARKLIFE
austin
maynard
architects

○ PRIVATE
○ SEMI-PRIVATE
○ PUBLIC



⑦ Seventh Level Floor Plan
1:500 (A4)

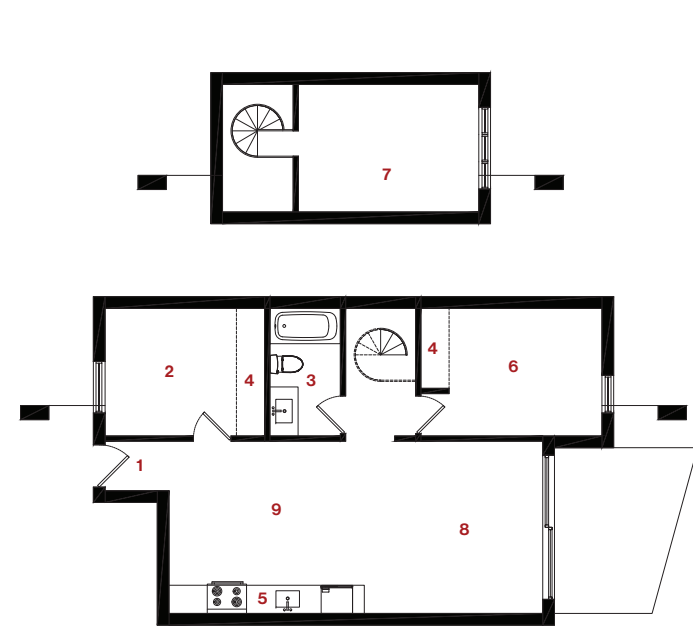
○ PRIVATE
○ SEMI-PRIVATE
○ PUBLIC

Three Bedroom Duplex Unit

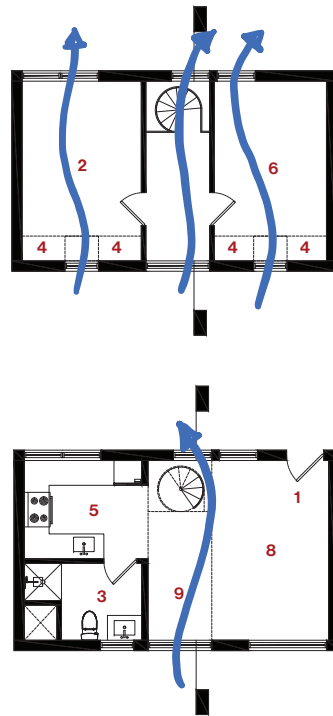
Bedrooms - 3
Baths - 1

References:

Parklife. Austin Maynard Architects. (n.d.). <https://maynardarchitects.com/parklife-by-austin-maynard-architects>



Residential Floorplans
(Original Drawings)



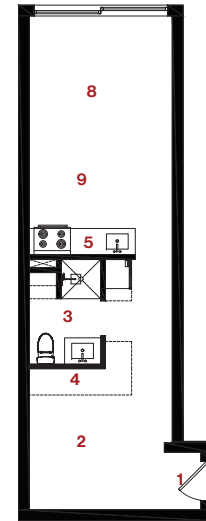
Two Bedroom Duplex Unit

Bedrooms - 2
Baths - 1

Studio Unit

Bedrooms - 0
Baths - 1

Extras:



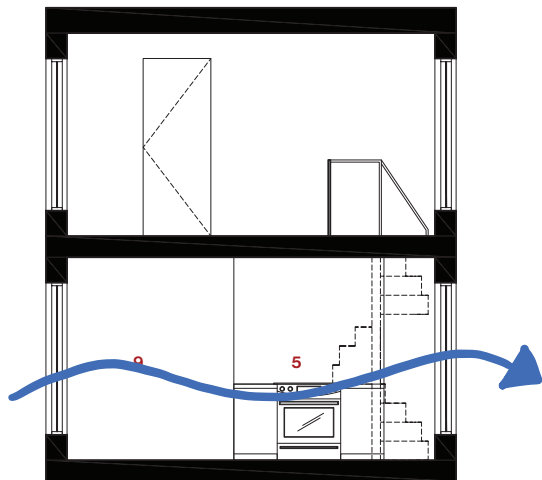
Legend

- 1 Foyer
- 2 Bedroom 1
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed 2
- 7 Bed 3
- 8 Living Room
- 9 Dining Room

References:

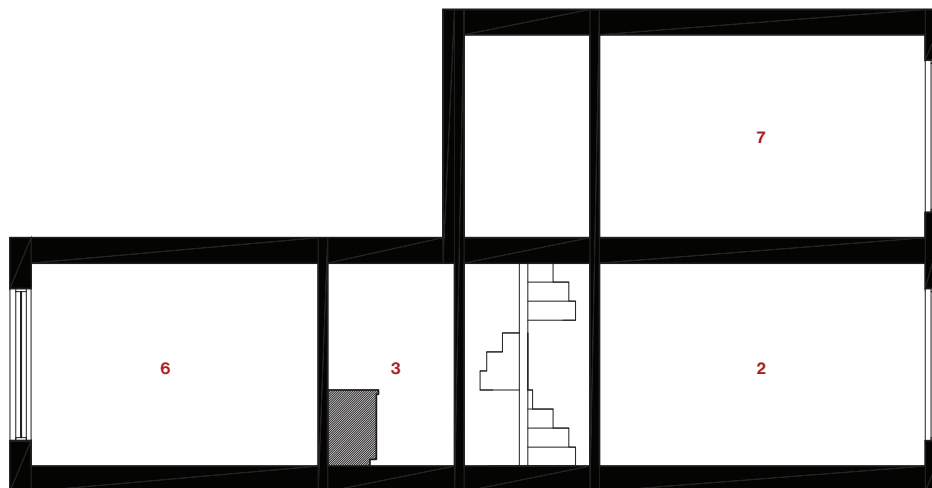
Parklife. Austin Maynard Architects. (n.d.). <https://maynardarchitects.com/parklife-by-austin-maynard-architects>

Two Bedroom Duplex Unit Section



Residential Duplex Sections
(Original Drawings)

Three Bedroom Duplex Unit Section



Legend

- 1 Foyer
- 2 Bedroom 1
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed 2
- 7 Bed 3
- 8 Living Room
- 9 Dining Room



References:

Parklife. Austin Maynard Architects. (n.d.). <https://maynardarchitects.com/parklife-by-austin-maynard-architects>

Summary

Key Takeaways & Lessons

Integration with Nature

- Urban residential projects can seamlessly blend with natural surroundings, creating a strong connection between indoor living and outdoor spaces.
- Proximity to green spaces (like Edinburgh Gardens) can enhance residents' quality of life by incorporating views and access to nature into the design.

Sustainability First

- Sustainable architecture goes beyond energy efficiency by incorporating passive design strategies, such as optimizing natural light, ventilation, and thermal mass.
- Prioritizing environmental performance through materials, renewable energy (solar panels), and water-saving technologies reduces the building's ecological footprint while maintaining comfort.

Use of Natural Materials

- Using materials like timber not only reduces the carbon footprint but also creates a warm, inviting aesthetic that enhances the connection between nature and the built environment.
- Sustainable material choices can align with both environmental goals and aesthetic ambitions, improving the overall atmosphere of the home.

Community and Urban Connectivity

- A residential project can enhance its local environment by visually and functionally linking to surrounding public spaces, like parks and gardens.
- Architecture that engages with its community and urban context creates a more connected, socially inclusive living experience, benefiting both residents and the wider area.

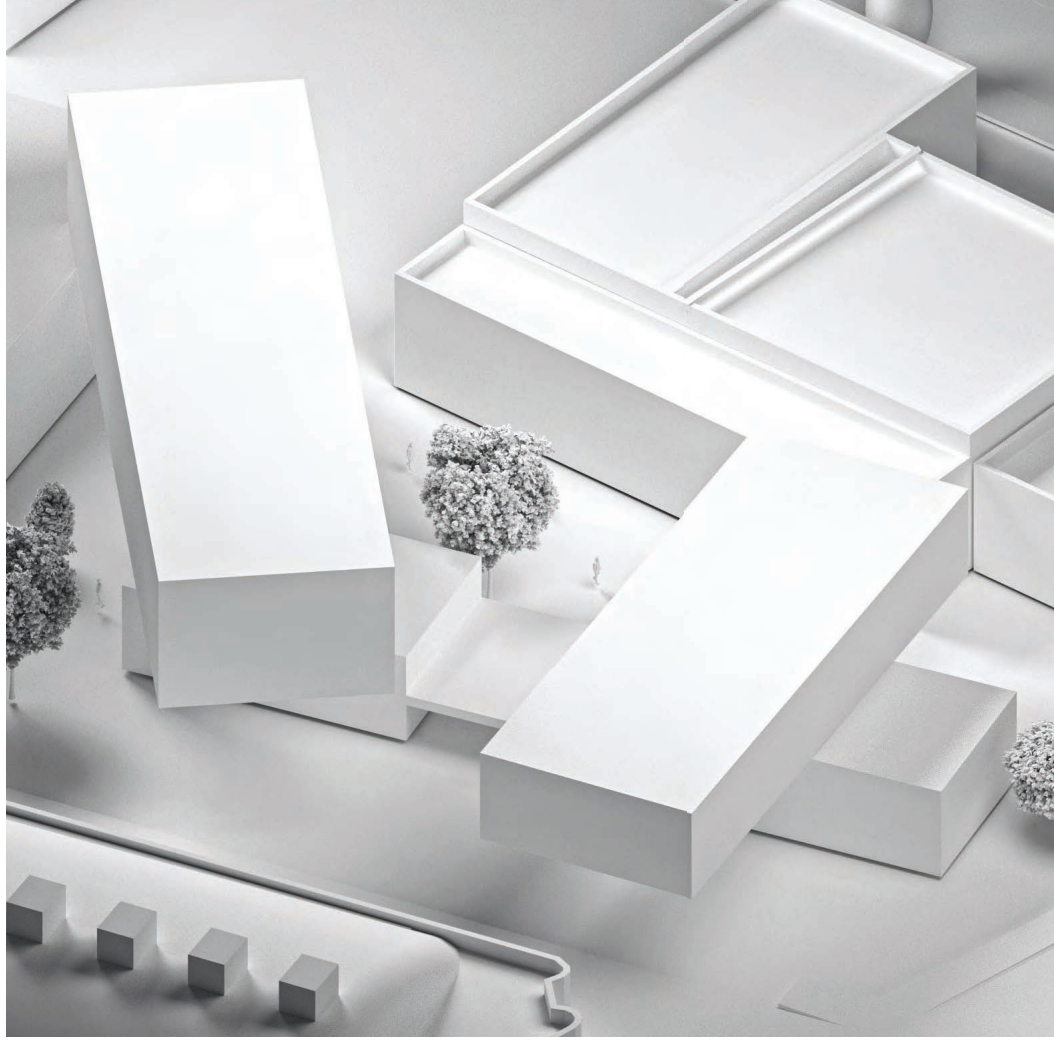
Innovative Approaches to Urban Living

- Architecture can redefine urban living by focusing on compact, yet high-quality, spaces that prioritize sustainability and aesthetics over sheer size.
- Smaller, sustainable homes with smart design can offer a higher quality of life by focusing on the essentials: connection to nature, energy efficiency, and adaptable spaces.

Conclusion

Parklife demonstrates that sustainable, flexible, and context-sensitive design can create modern urban homes that balance environmental responsibility with a strong connection to the natural and social environment.

PE2 - Conceptual Design Module 2



Render of Massing Model

INITIAL SUMMARY

TOPICS

Concept

| | |
|-------------------|---|
| Areas of Interest | 4 |
|-------------------|---|

Precedent Research

| | |
|-----------------------------|---|
| Assemble Chicago + ParkLife | |
| Unit Type | 6 |
| Programming | 7 |

Location

| | |
|-----------|---|
| Site Plan | 9 |
|-----------|---|

Isometric Massing Diagrams

| | |
|----------------------------|-------|
| Process Isometric Diagrams | 11 |
| Final Diagrams Original | 12-13 |
| Programming Isometric | 14 |

Model

| | |
|-----------------------|-------|
| Exterior Perspectives | 16-17 |
| Study Model | 18 |

Plans

| | |
|------------------|-------|
| Program Sections | 20 |
| Unit Floorplans | 21-22 |



Areas of Interest



Shot of Future Construction Site

Areas of Interest

Community

Cultural and Social Integration

- Design communal spaces to reflect local culture
- Promote social interaction and cultural continuity

Access to Essential Services

- Safe, accessible routes for walking and public transit

Economic Opportunities

- Create mixed-use developments for local jobs
- Strengthen local economy with better access to employment

Gentrification & Displacement Prevention

- Maintain affordability to protect long-term residents
- Prevent displacement, preserve neighborhood identity

Sustainability

Environmentally Friendly

- Use sustainable materials
- Improved stormwater quality through landscaping and rainwater tanks.
- Natural ventilation with energy recovery ventilators
- All-electric building: no gas.

Tribute to Existing Neighborhood

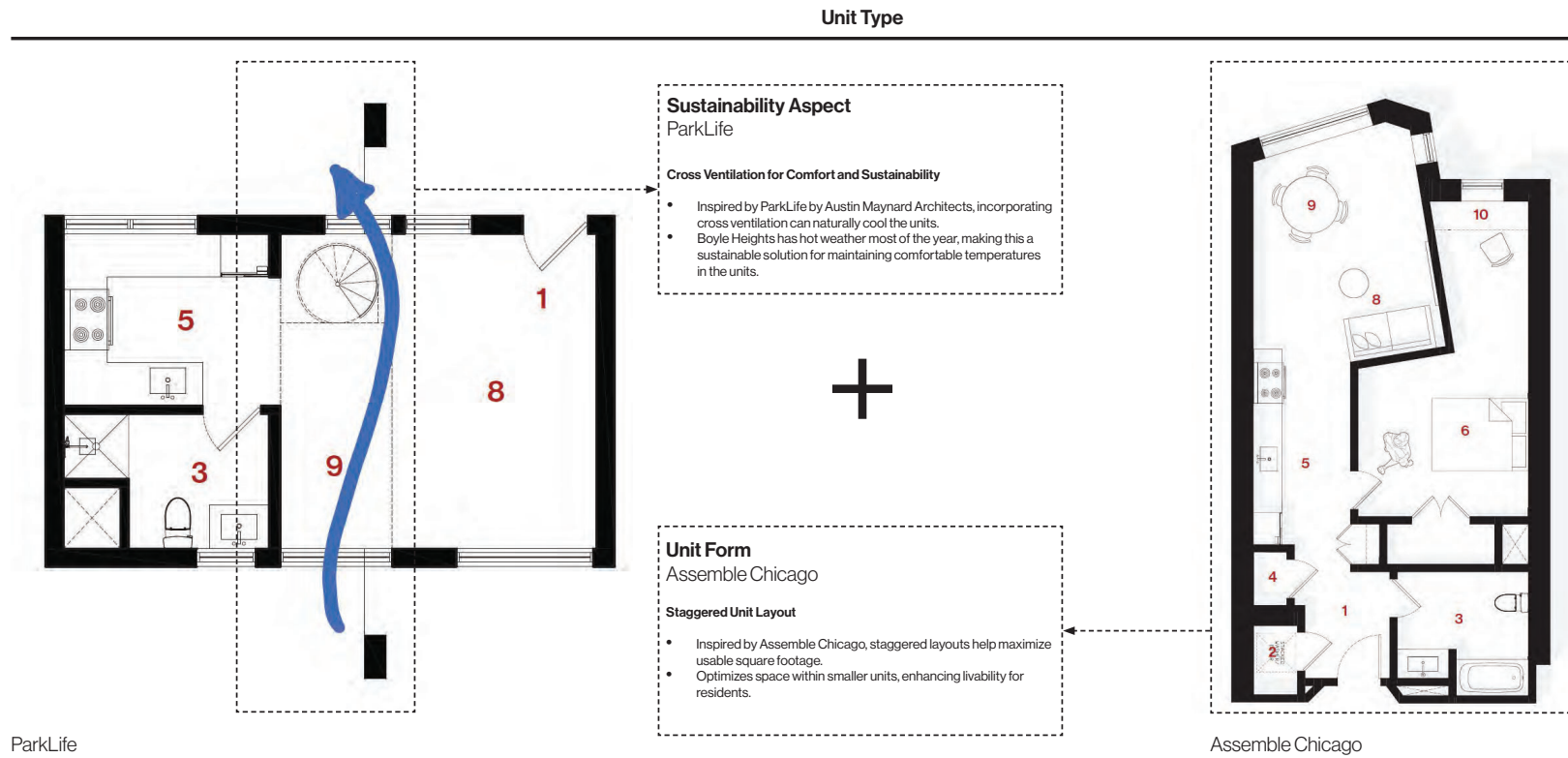
Materials

- Use materials that are familiar to the community, reinforcing a sense of place.

Form

- Reference traditional building styles in modern ways to maintain a visual and emotional link to the neighborhood's past.

Precedent Research
Assemble Chicago + Parklife



Programming



Programming
ParkLife + Assemble Chicago

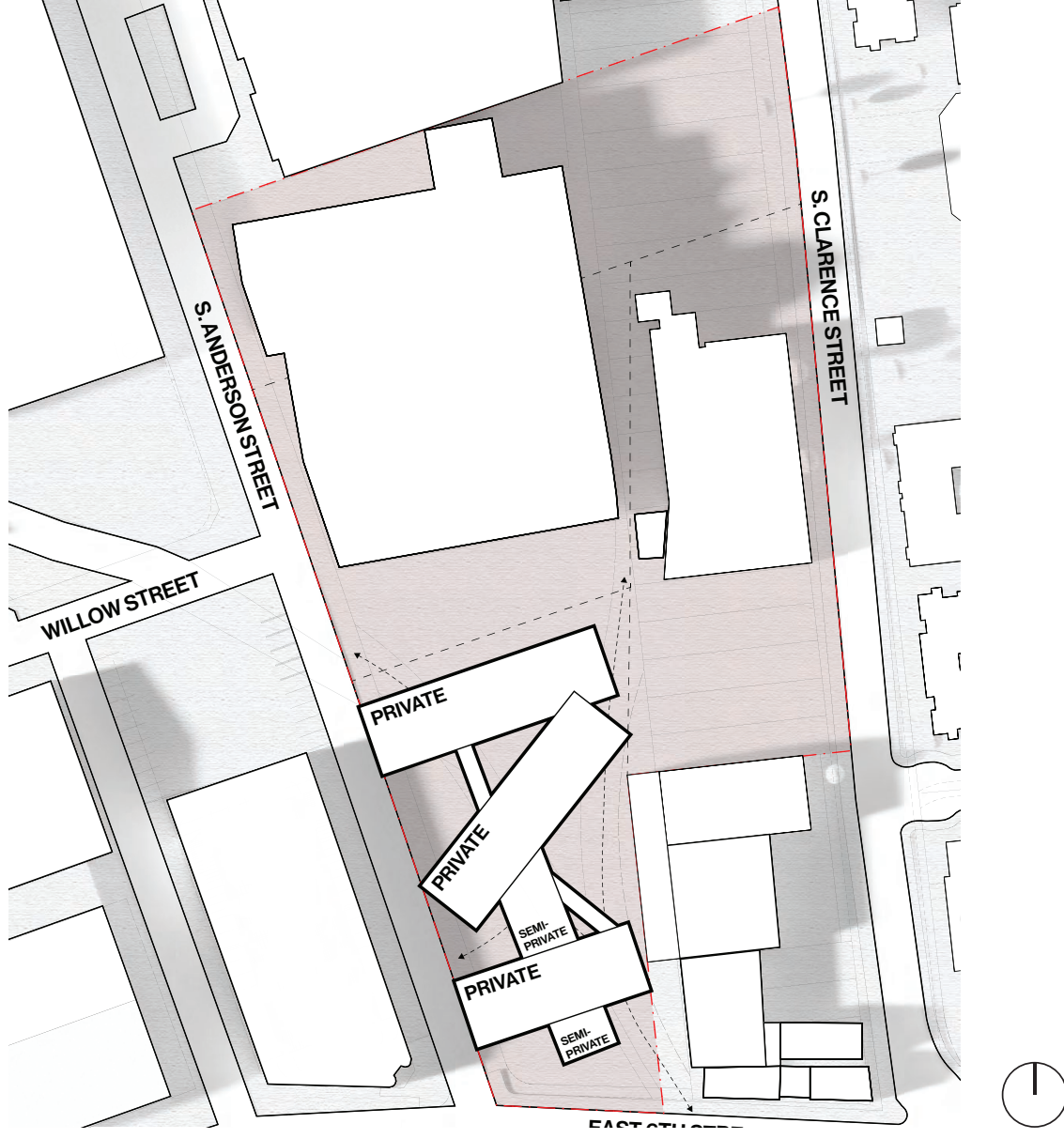
Public + Semi-Private + Private

- Both Assemble Chicago and ParkLife position public areas to create a buffer between public and private spaces.
- Incorporating semi-private areas throughout the buildings promotes tenant interaction.
- These spaces help residents form stronger social bonds, enhancing the sense of community.



- 0 PRIVATE
0 SEMI-PRIVATE
0 SERVICE
0 VERTICAL CIRCULATION

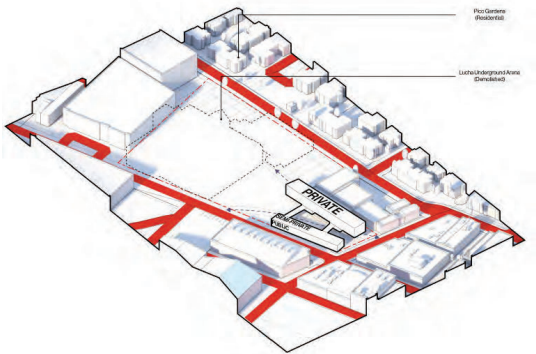
Location
Siteplan



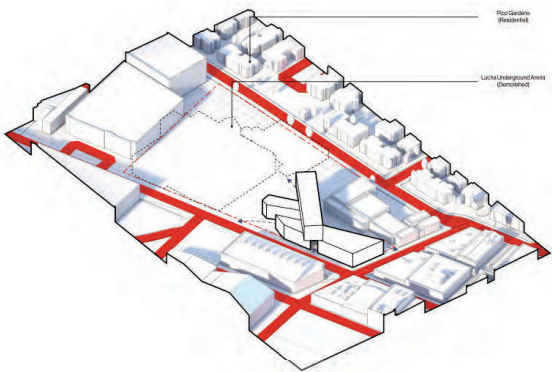
Siteplan - 1/32" = 1'-0"

Isometric Massing Diagrams

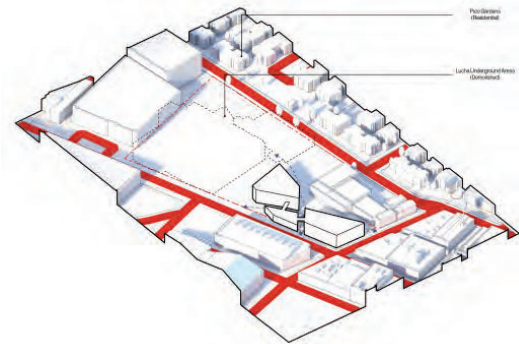
Process Isometric Diagrams



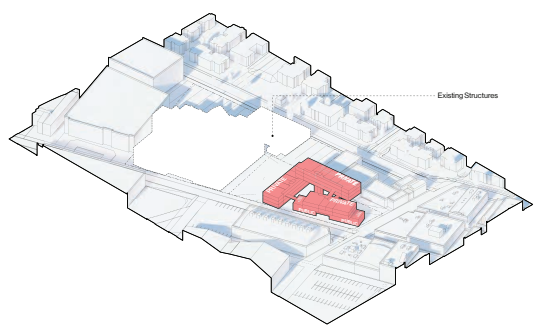
Massing One



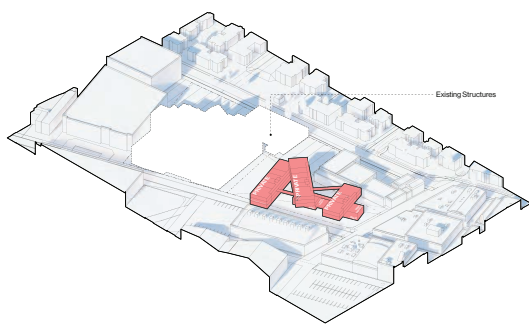
Massing Two



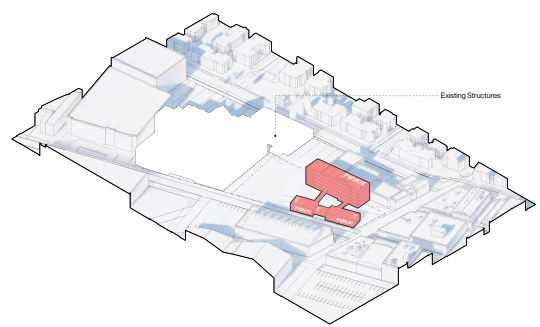
Massing Three



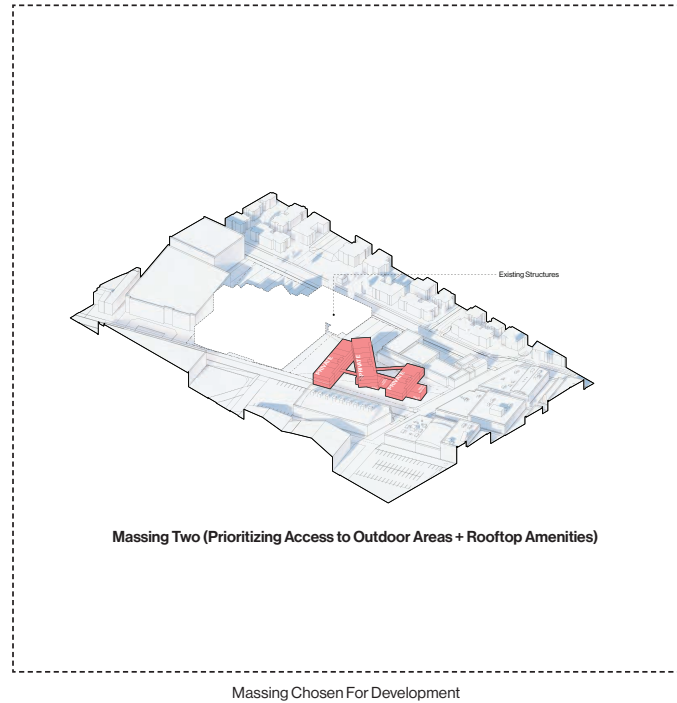
Massing One (Central Courtyard + Elevated Paths)



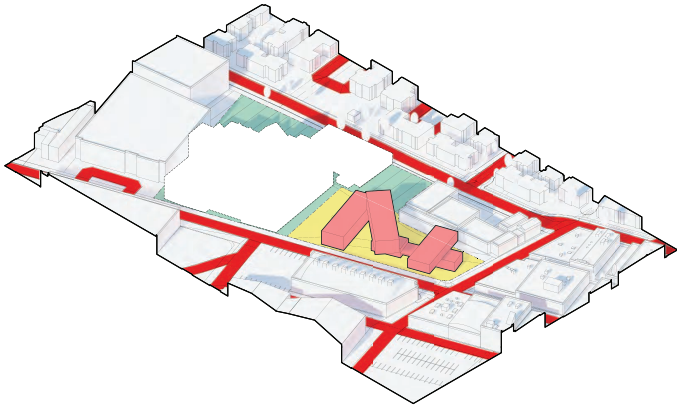
Massing Two (Prioritizing Access to Outdoor Areas + Rooftop Amenities)



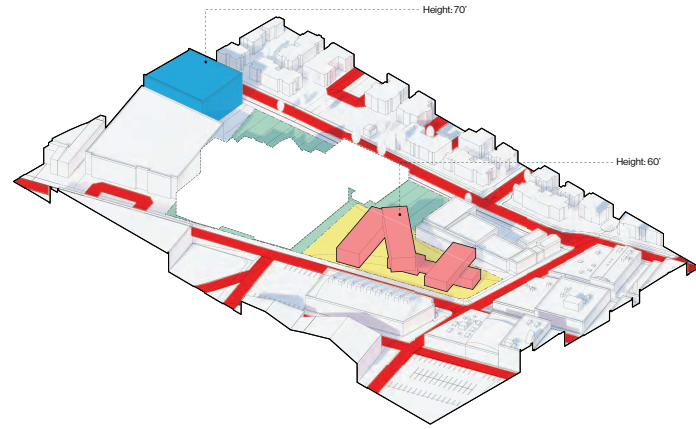
Massing Three (Minimal Footprint)



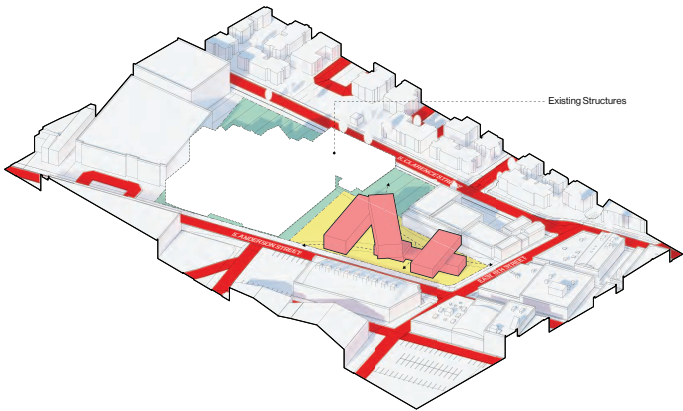
Massing Chosen For Development



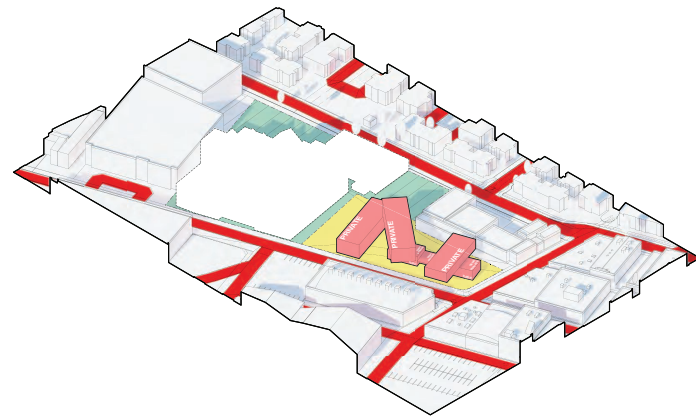
Parcel Layout



Height Relations

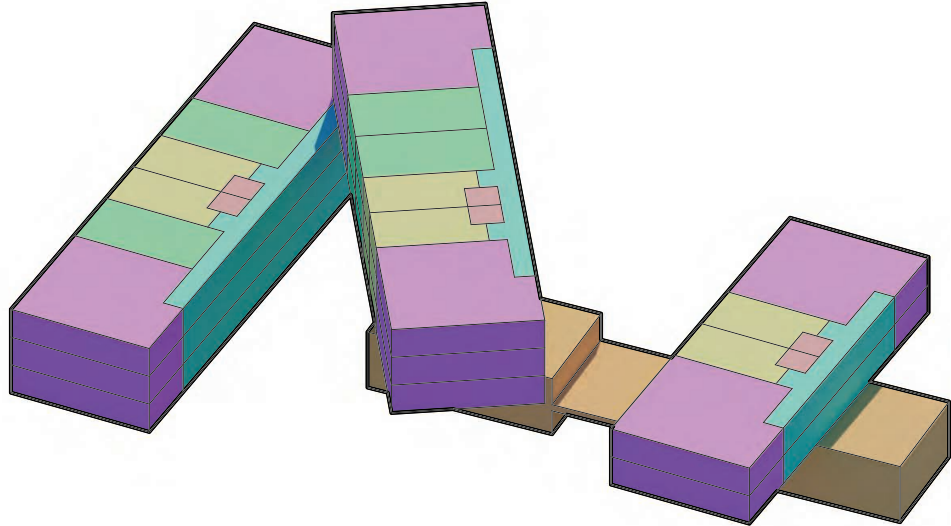


Site Access



Private to Public Relations

Programming Isometric



Public Spaces = (Medical Clinics + Markets + Cafe's)



Horizontal Circulation Spaces



One Bedroom Units (700 sqft) = (Bedroom + Kitchen + Bathroom + Living) x 12 = 8400 sqft



Vertical Circulation = (Stairs + Elevators)



Studio Units (600 sqft) = (Bed/Living + Kitchen + Bathroom) x 16 = 9600 sqft

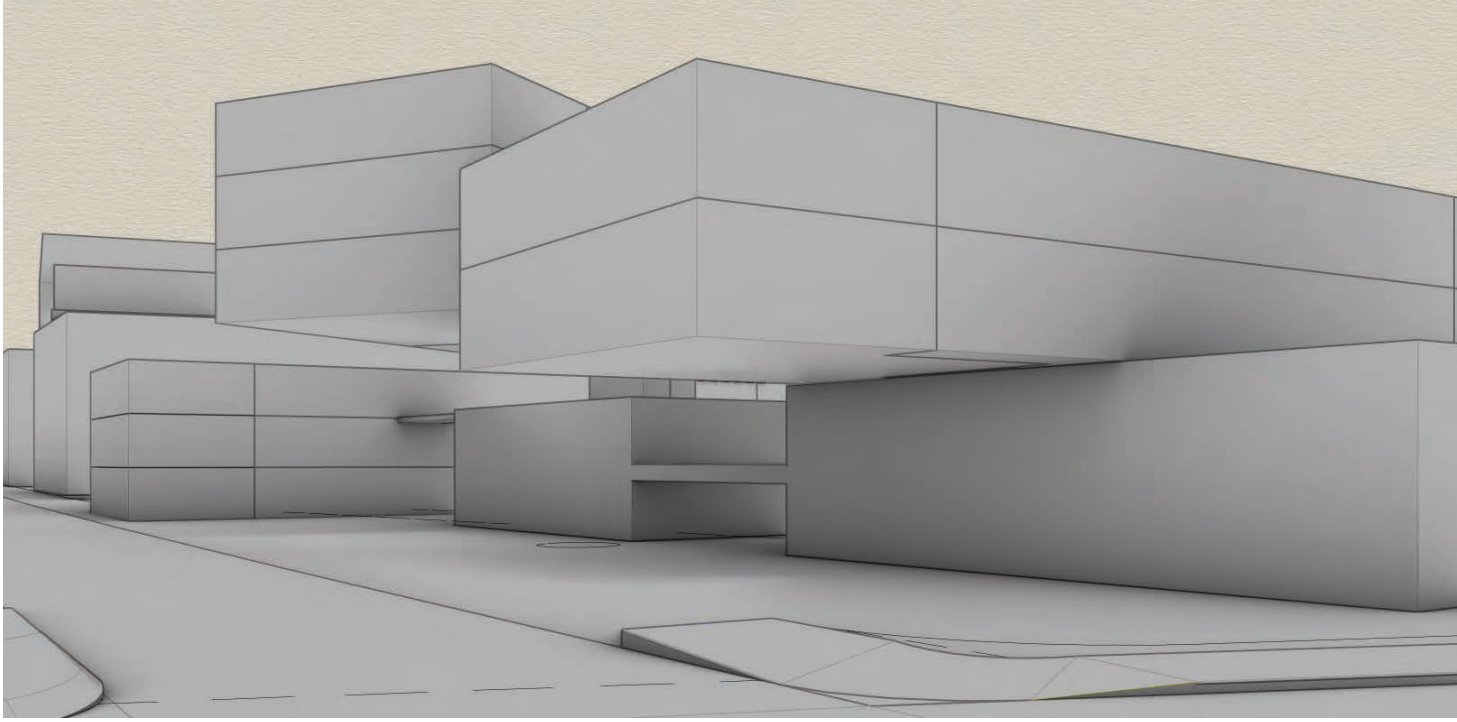


Two Bedroom Units (1300 sqft) = (Bed (2) + Living + Dining + Kitchen + Bathroom) x 16 = 20800 sqft

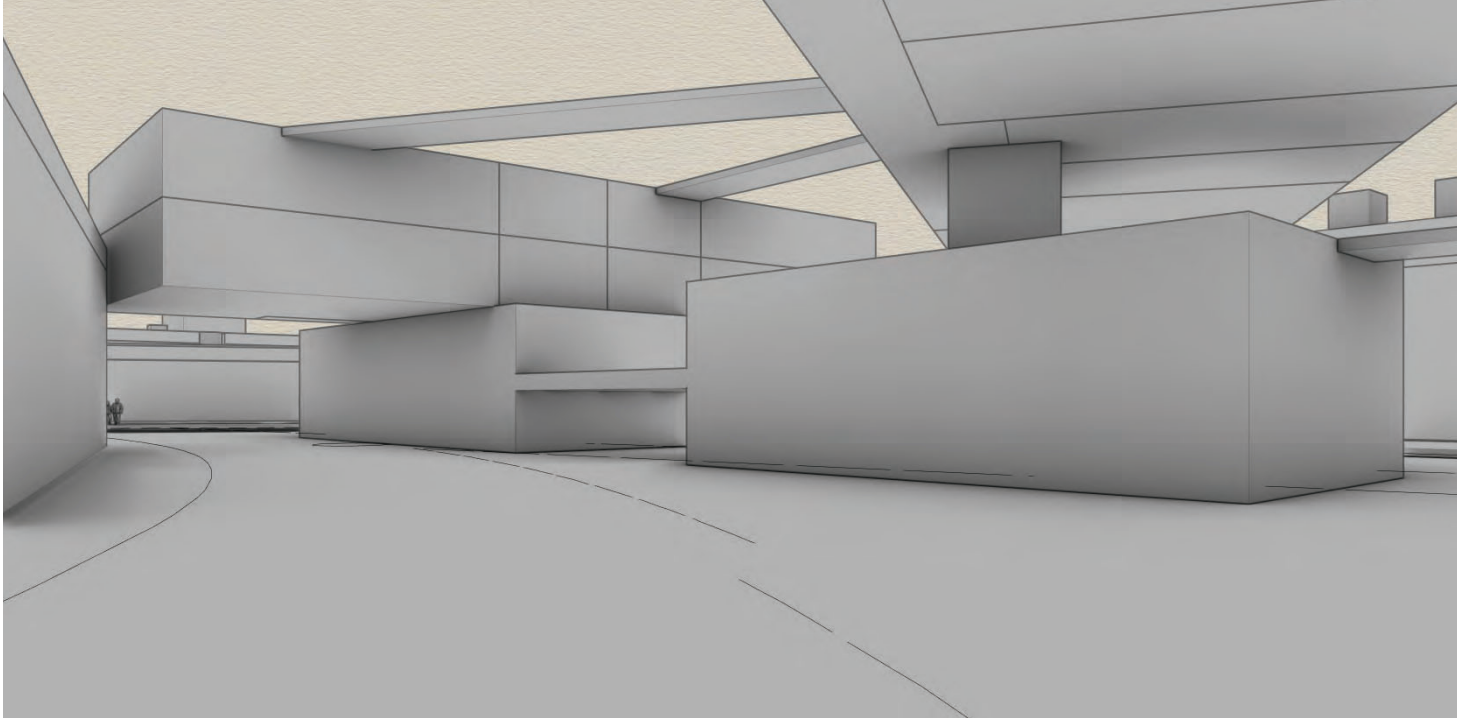
Private = Total Units = Two Bedroom (16) + One Bedroom (12) + Studio (16) = **44 Units**
Private = Total Sqft = Two Bedroom (20800) + One Bedroom (8400) + Studio(9600) = **38800 sqft**
Public = Total Sqft = (Medical Clinics + Markets + Cafe's) = **4880 sqft**

Model
Exterior Shots + Physical Model

Perspective View East 6th Street & S. Anderson St



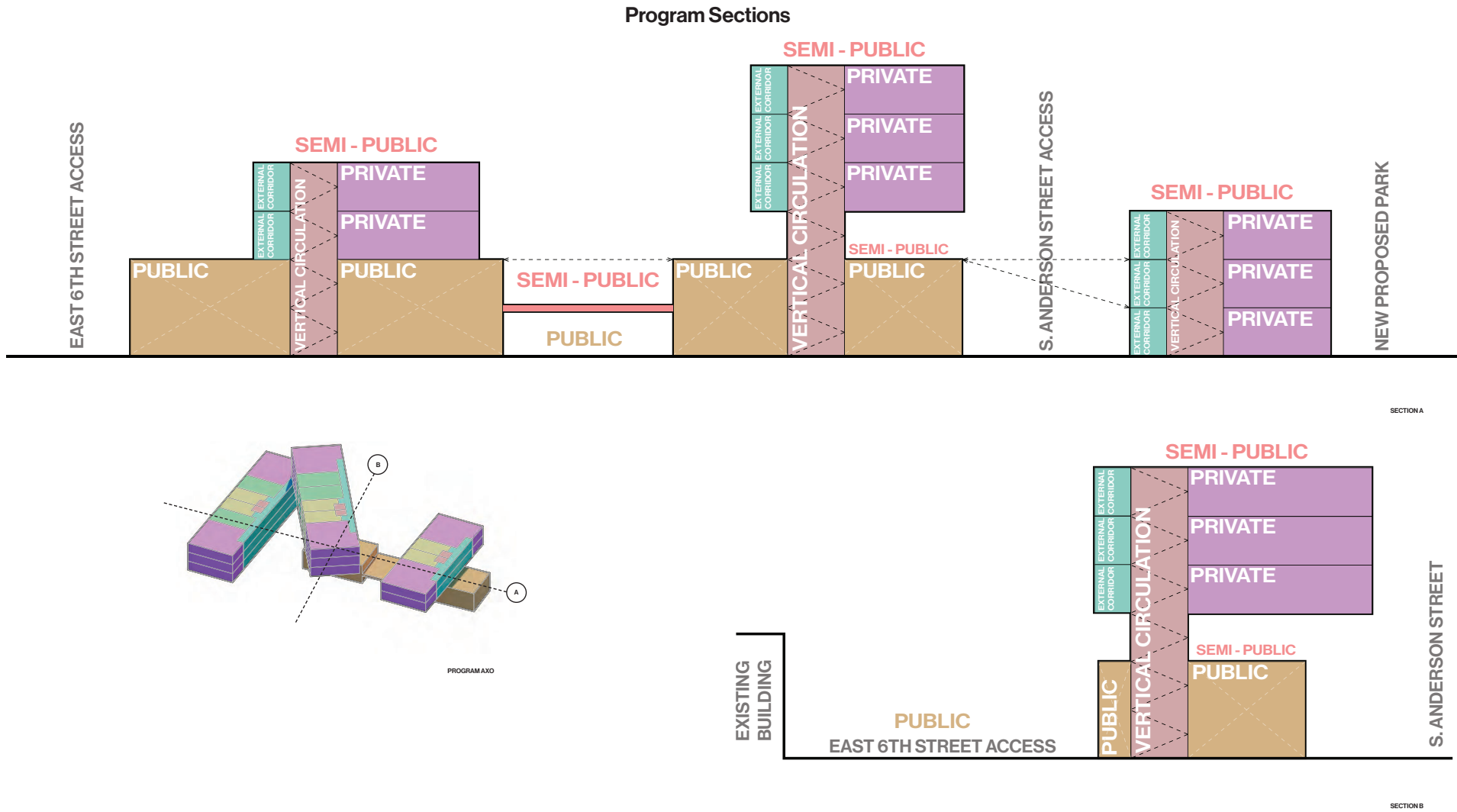
Perspective View Courtyard

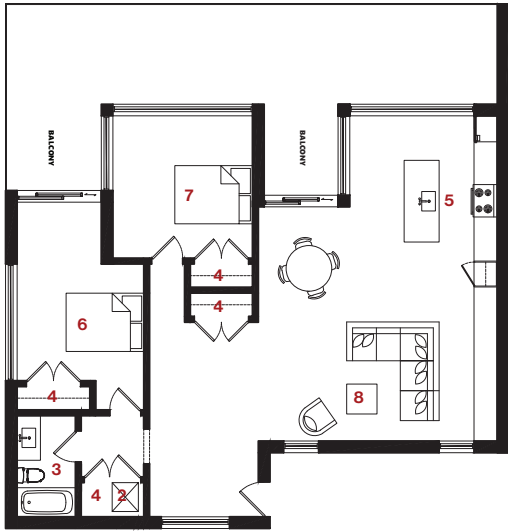




Physical Model

Units
Floorplans & Sections





Two Bedroom Unit

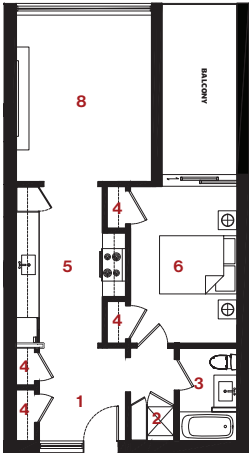
| | |
|------------|---|
| Bedrooms - | 2 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

Area: 1060 SQFT

Floorplans 1/16" = 1'-0"



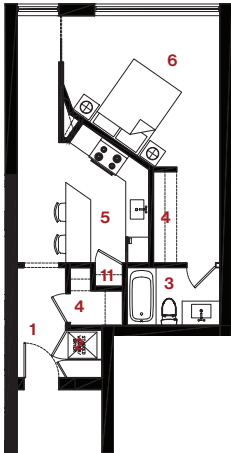
One Bedroom Unit

| | |
|------------|---|
| Bedrooms - | 1 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

Area: 689 SQFT



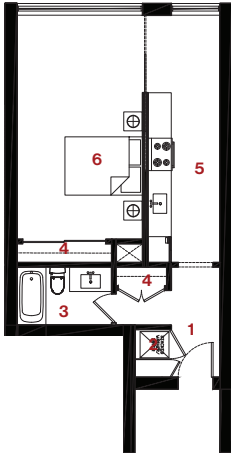
Studio Unit A

| | |
|------------|---|
| Bedrooms - | 0 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible

Area: 500 SQFT



Studio Unit B

| | |
|------------|---|
| Bedrooms - | 0 |
| Baths - | 1 |

Extras:

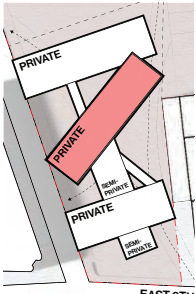
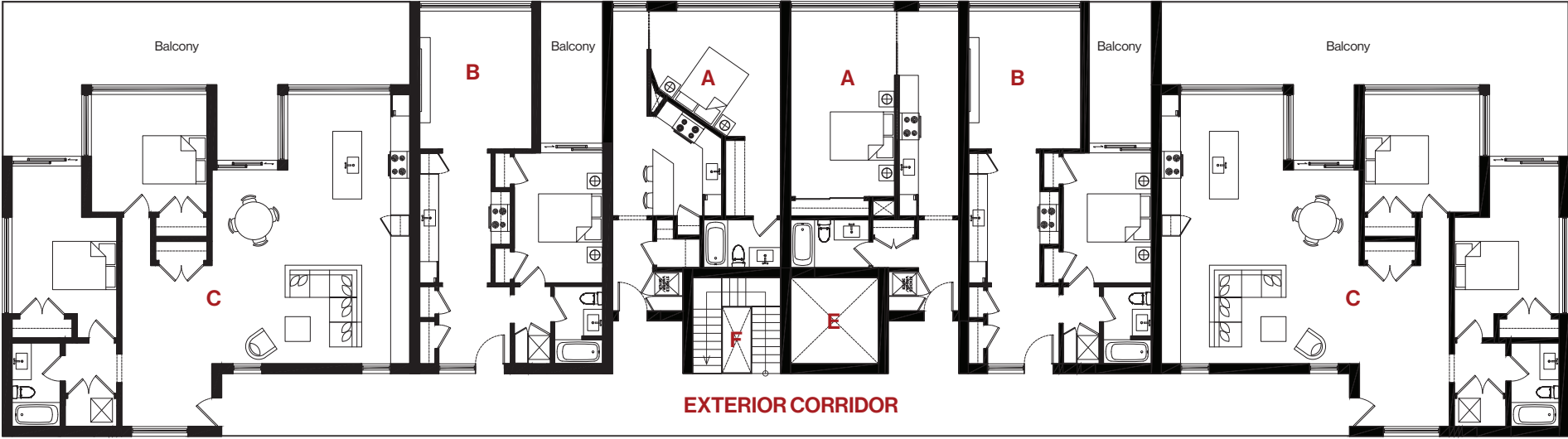
Laundry (Washer/Dryer), Accessible

Area: 500 SQFT

Legend

- 1 Foyer
- 2 Laundry
- 3 Bathroom
- 4 Closet
- 5 Kitchen
- 6 Bed
- 7 Bed 2
- 8 Living Room
- 9 Dining Room
- 10 Study
- 11 Pantry

Residential Floor Layout 1/16" = 1'-0"



- Typical Plan Layout
- Legend
- A Studio Units
 - B One Bedroom Units
 - C Two Bedroom Units
 - D Storage
 - E Elevator
 - F Stairs

ARC 501o

Module 3

Schematic Design

Assignment 3.2

Sustainability + Systems Design Integration

The goal of this exercise is to define an approach to providing a safe and healthy environment for the inhabitants of your project through your understanding of local climactic and environmental (and other) considerations.

Deliverables

- A single, consolidated PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Sustainable Design Isometric Diagram
- Indicating project massing
- Primary passive sustainable / regenerative design strategies clearly defined
- Structural Design Isometric Diagram
- Clear selection of type of structure
- Indicating primary structure location and load path
- Systems Distribution Building Section (1/16"=1'-0)
- Trace overlay of systems distribution

Assignment 3.3

Regulatory Context + Constructability

The goal of the exercise is to establish an understanding of the decision making and prioritization process as relates to navigating project parameters, such as regulations and constructibility.

Deliverables

- A single, consolidated PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Summary matrix / table containing information as referenced above (in addition to anything else you wish to include)
- Isometric diagram indicating path of egress
- Isometric diagram indicating accessible path of travel
- Enlarged floor plan (1/4"=1'-0") including accessibility information as referenced above (in addition to anything else you wish to include)
- Enlarged exterior wall section (1/2"=1'-0")

Assignment A 3.4

Precedent Analysis

The goal of the exercise is to conduct research and analysis of a precedent housing project and document the essential elements of what is discovered in the research.

Students will be assigned a local housing project or program and will be asked to analyze and document the ideas and elements essential to each

Deliverables

Each student will be assigned and then asked to conduct independent topical research related to a specific subject, then generate:

- A single, consolidated 10-15 slide PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages) including diagrammatic mapping. Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- Project stats (year built, size, number of units + type, etc.)
- Written narrative consolidating key ideas discovered during research
- Key diagrams, concept drawings, and illustrations -- must be original drawings, drawn by the student completing the study
- Architectural drawings (site plan, floor plan(s), sections(s), elevations, etc.) -- must be original drawings, drawn by the student completing the study
- Project imagery
- Summary of key ideas and lessons extrapolated from the precedent project
- Two of the following:
- A traced overlay of a section highlighting the main ideas / concepts in the project
- A traced overlay of a floor or site plan highlighting the main ideas / concepts in the project
- A traced overlay of an axonometric / isometric diagram highlighting the main ideas in the project
- Upload link to a 5-minute recording

Assignment A PE3

Schematic Design Package

At the completion of this module, students are expected to submit a package that includes the outcomes of assignments as well as representations of the ongoing development of their projects.

The goal of this exercise is to advance your project from conceptual design to a schematic design level of development.

Deliverables

- A single, consolidated PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This Schematic Design Package document is expected to contain the following minimum materials:
- Isometric Massing Diagrams (with surrounding context)
- Site context
- Site and project circulation / access + egress / accessible path of travel
- Programmatic organization
- Environmental / ecological factors
- Sustainable / regenerative design strategies
- Structural design
- Site plan (1/32"=1'-0")
- Site + Building Section (1/32"=1'-0")
- Floor Plan(s) (1/16"=1'-0)
- Building Section (1/16"=1'-0)
- Typical Unit Plan(s) (1/4"=1'-0) Please include applicable accessibility information.
- Enlarged Wall Section (1/2"=1'-0")
- Minimum one (1) Exterior Perspective
- Minimum one (1) Section Perspective focusing on interior residential units and hybrid program
- 5 images of further developed study model (NE, SE, SW, NW and top view)
- Download link to your Rhino (or similar) digital model. Please do not direct upload.
- Upload link to a 5-minute recording of yourself presenting the PDF document. Please do not direct upload.

Sustainability & Systems Design

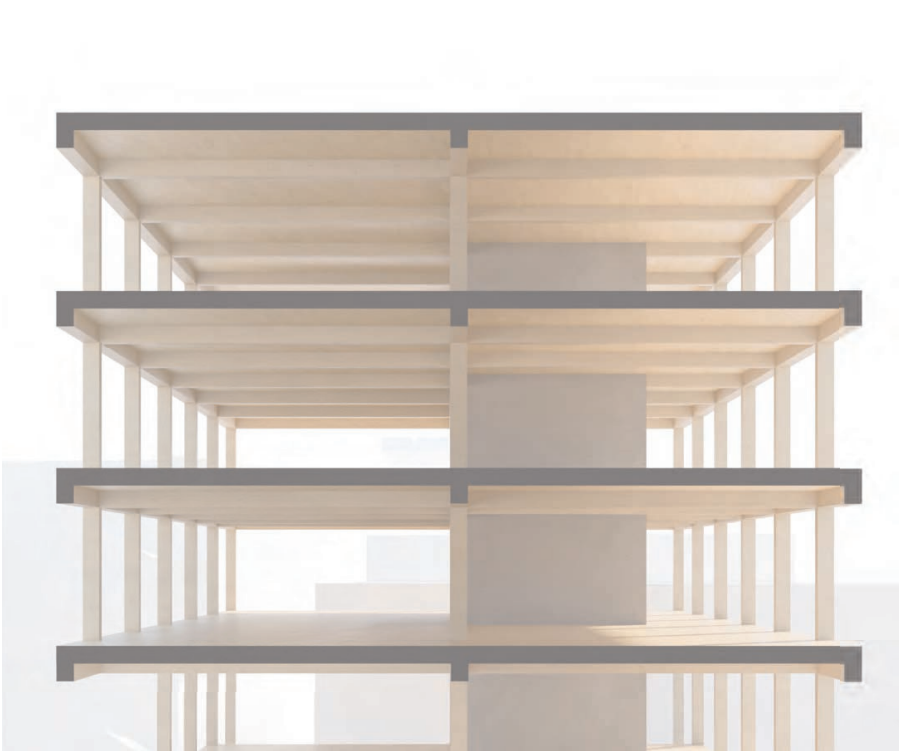
Module 3.2



INITIAL SUMMARY

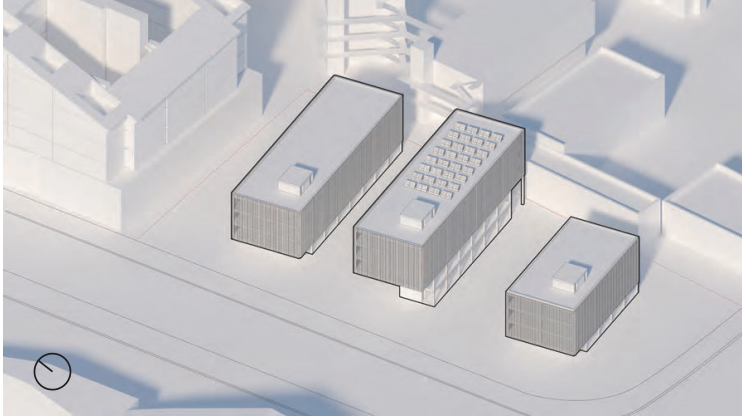
TOPICS

| | |
|---|------|
| Step One Sustainability & Passive Design Strategies | |
| Sun Study | 4 |
| Sustainable Design Iso | 5 |
| Step Two Structure | |
| Structural Design Isometric Diagram | 7 |
| Structural Design Section | 8 |
| Structural Plans | 9-15 |
| Step Three Distribution of M/E/P Systems | |
| Section A | 17 |
| Section B | 18 |

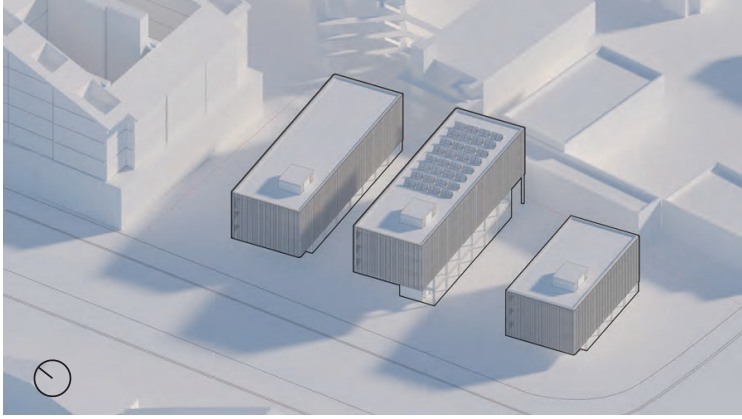


Step One

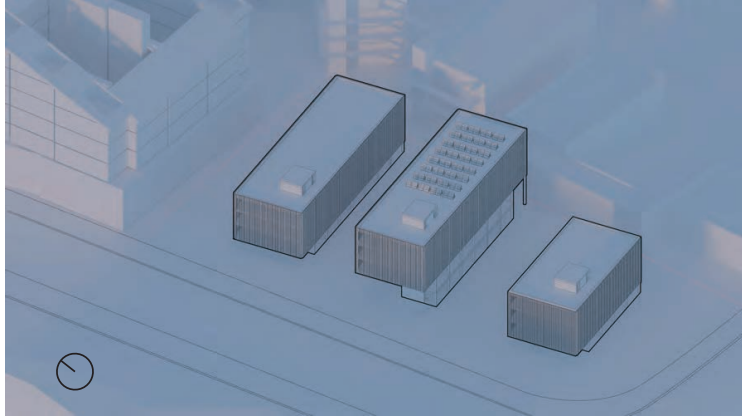
Sustainable and Passive Design Strategies



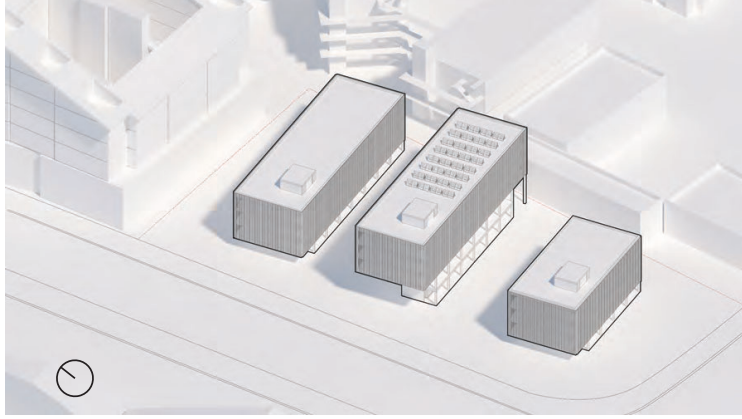
October 25, 2024 - 3:00 PM



October 25, 2024 - 8:00 AM

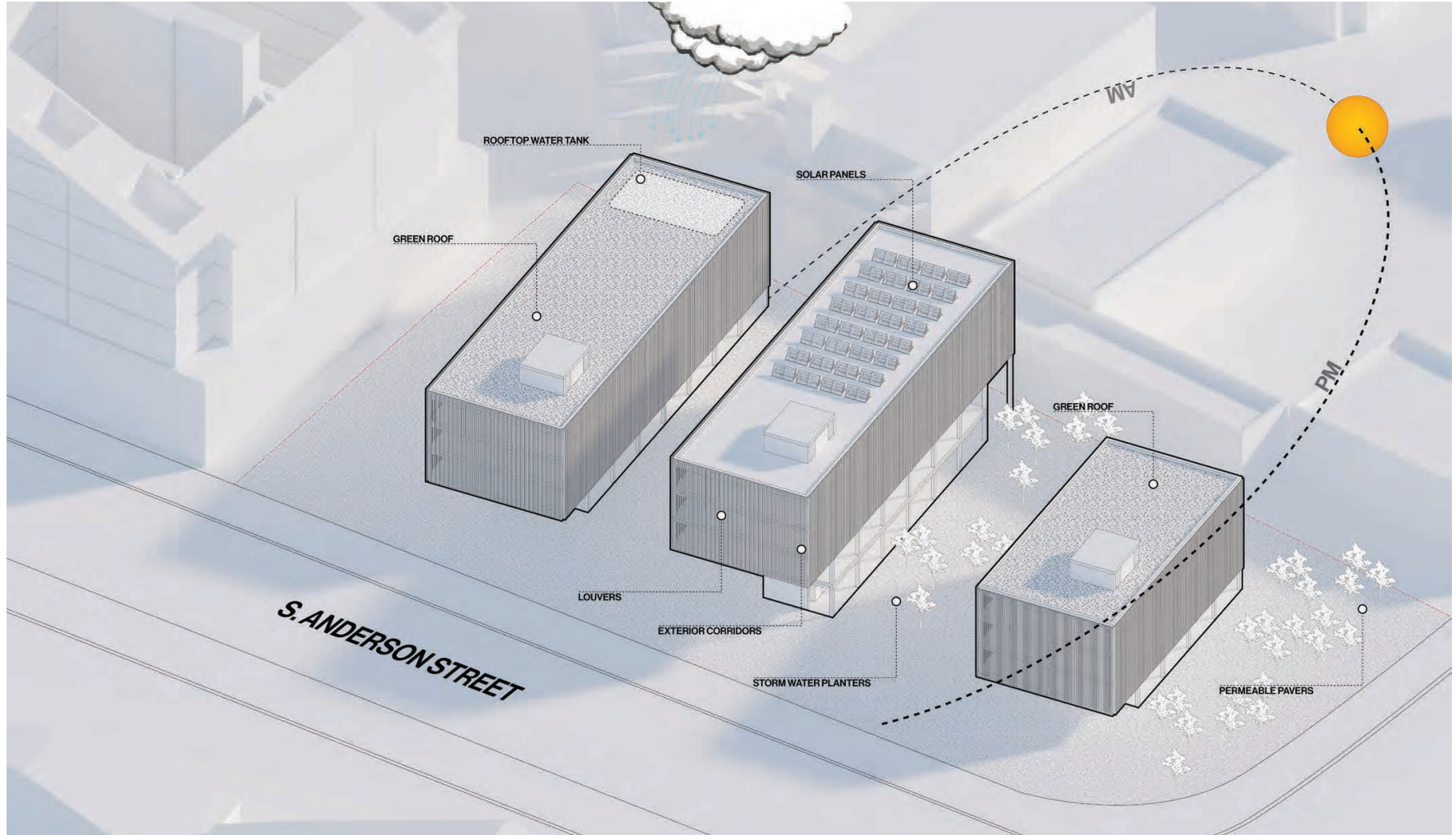


October 25, 2024 - 5:00 PM



October 25, 2024 - 12:00 PM

Sun Study

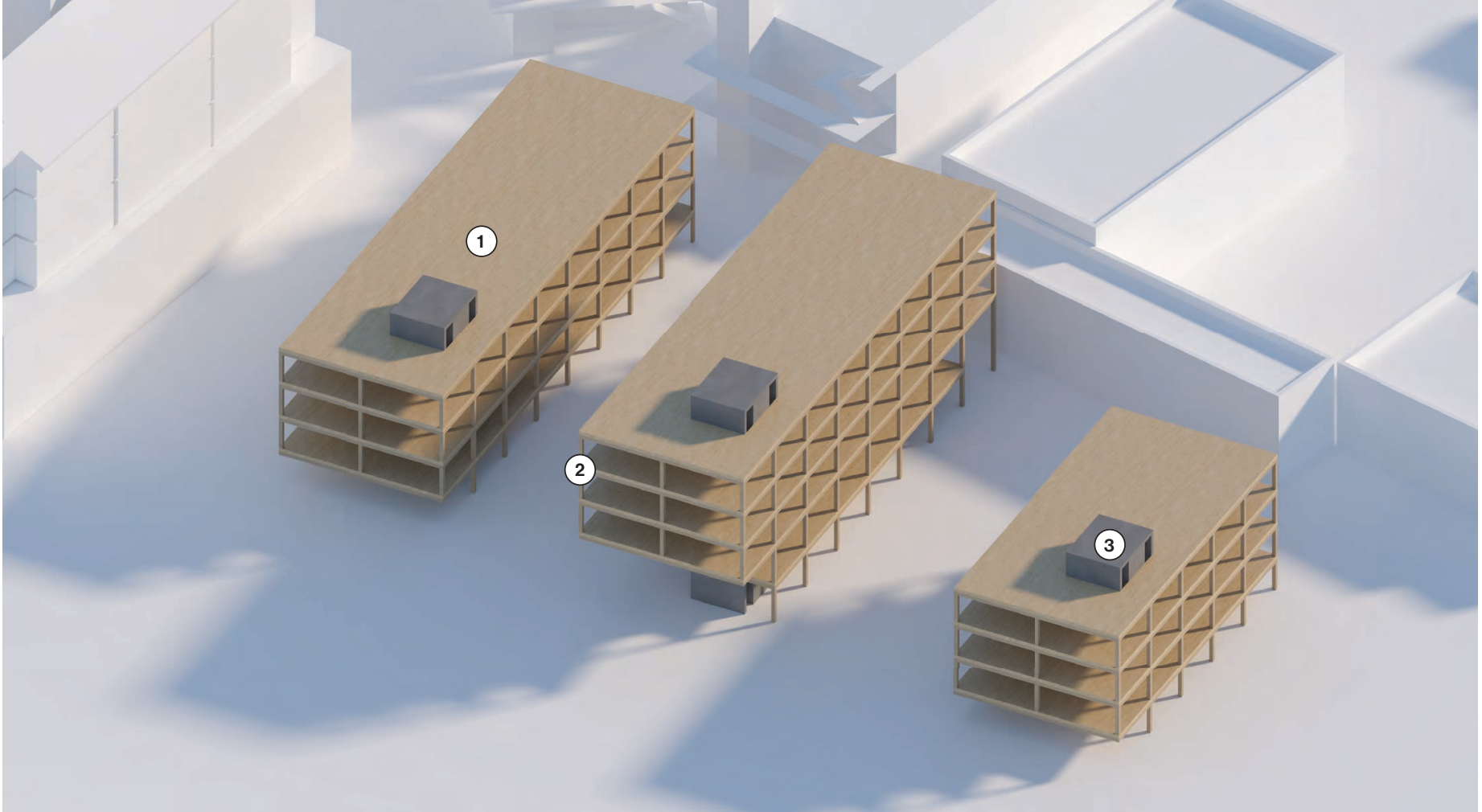


Sustainable Design Isometric Diagram

Step Two
Structure

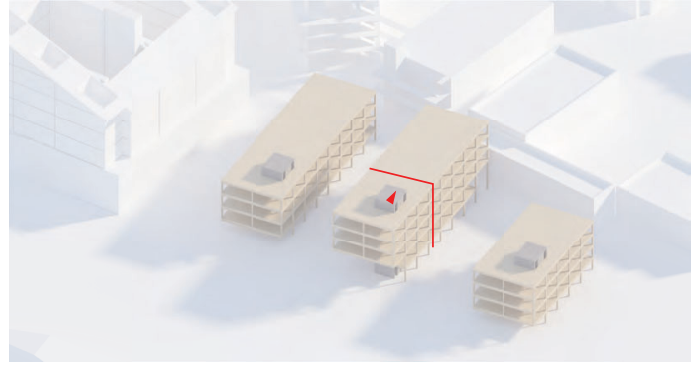
Structural Elements: Mass Timber Construction

1. CLT Floor Panels
2. Glulam Post and Beam System
3. Concrete Cores (Stairs, Elevator and Mechanical Shafts)





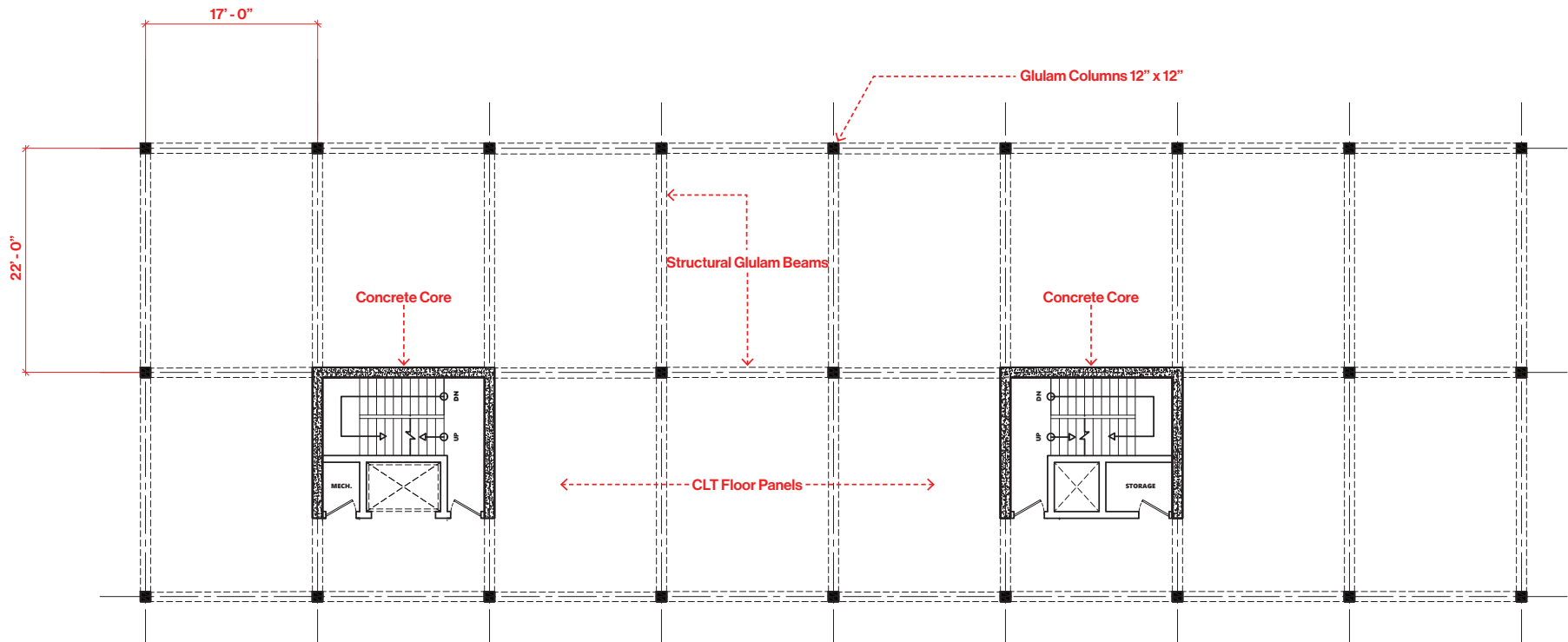
Structural Perspective Section



Structural Elements: Mass Timber Construction

1. CLT Floor Panels
2. Glulam Post and Beam System
3. Concrete Cores (Stairs, Elevator and Mechanical Shafts)

Structural Elements: Timber + Concrete/Steel Construction (Hybrid)



Floor Assembly Sample

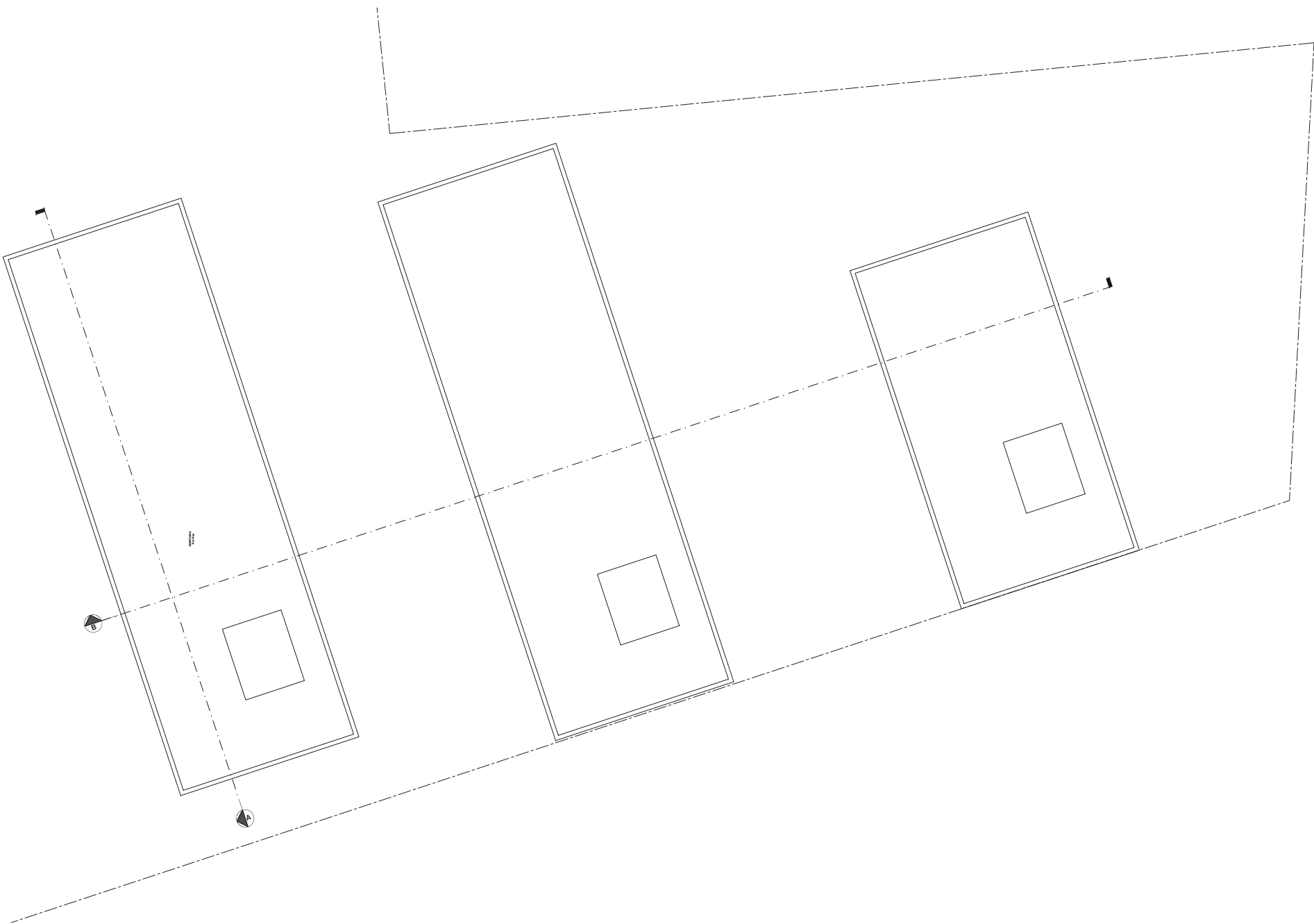




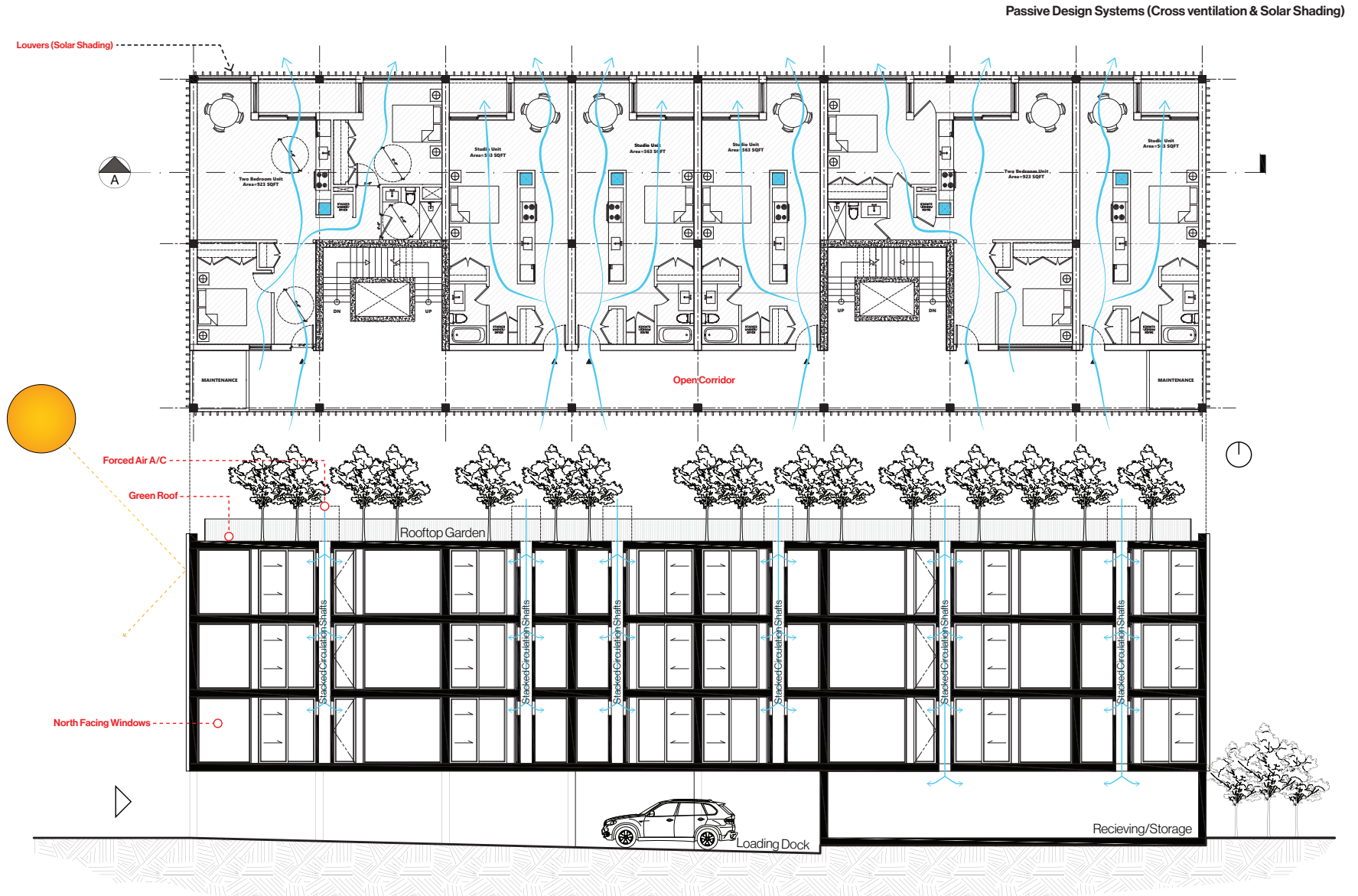


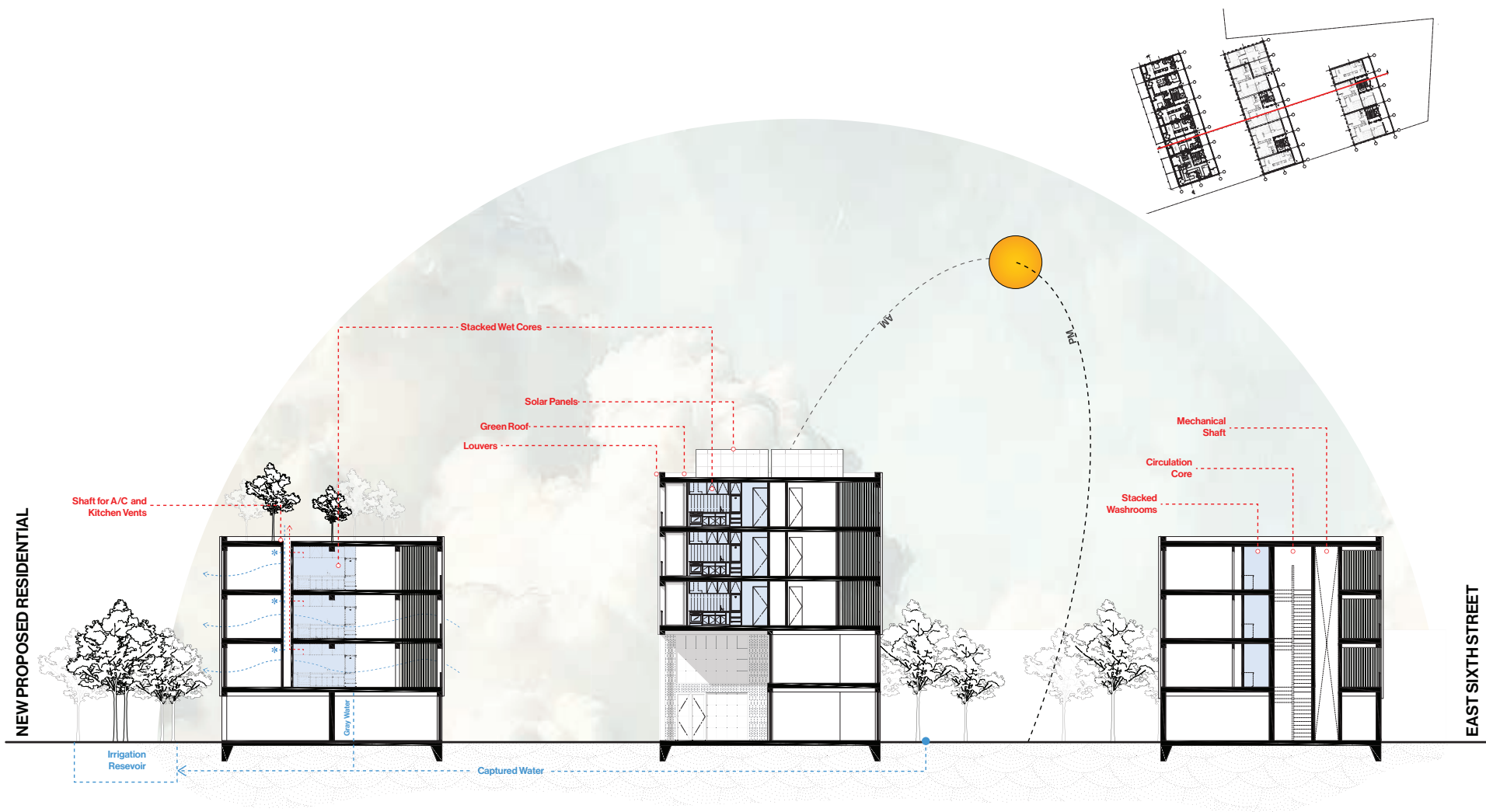






Step Three
Distribution of M/E/P Systems





Passive and Active Systems

Regulatory Context & Constructability

Module 3.3



INITIAL SUMMARY

TOPICS

Building and Fire Code
Occupancy and Means of Egress

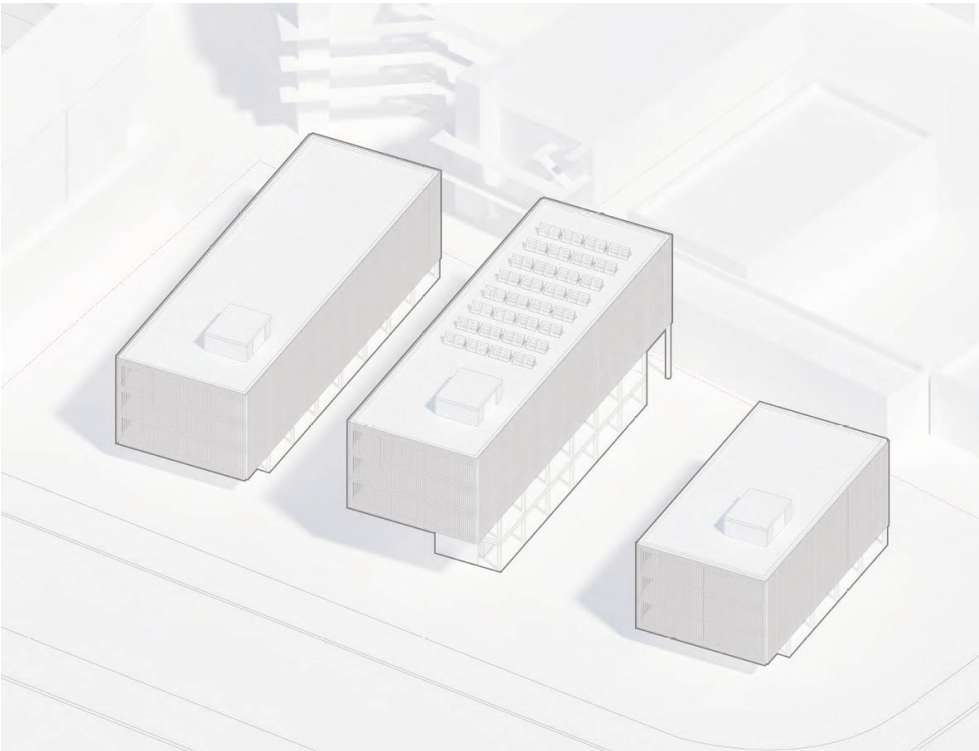
| | |
|---------------------------|-----|
| Matrix | 4 |
| Building Specs | 5 |
| Occupant Load | 6 |
| Means of Egress | 7-8 |
| Accessible Path of Travel | 9 |

Units
Common and Accessible

| | |
|-------------------------------|----|
| One Bedroom | 11 |
| Two Bedroom Unit | 12 |
| Two Bedroom Unit (Accessible) | 13 |
| Three Bedroom Unit | 14 |

Building Envelope
Section Detail and Assembly

| | |
|---------------|-------|
| Wall Sections | 16-17 |
|---------------|-------|



Building and Fire Code
Occupancy & Means of Egress

Building Matrix
Occupancy Types (Section 301)

Building A

Ground Floor

Lobby/Reception (Assembly Group A-3)
Storage (311.2 Moderate-Hazard Storage, Group S-1)
Mechanical (Section 312 Utility and Miscellaneous Group U)

Second Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Third Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fourth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Building A Units

Studio: 12 Units
Two Bedroom: 6 Units
Three Bedroom: 0 Units

Total Units: 18 Units

Building B

Ground Floor

Lobby/Reception (Assembly Group A-3)
Market (309.1 Mercantile Group M)
Mechanical (Section 312 Utility and Miscellaneous Group U)

Second Floor

Library (303.1.2 Small Assembly Spaces)
Cafe (303.1.2 Small Assembly Spaces)
Offices (304.1 Business Group B)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Third Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fourth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fifth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Building B Units

Studio: 3 Units
Two Bedroom: 9 Units
Three Bedroom: 3 Units

Total Units: 15 Units

Building C

Ground Floor

Market (309.1 Mercantile Group M)
Mechanical (Section 312 Utility and Miscellaneous Group U)

Second Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Third Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fourth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Building C Units

Studio: 3 Units
Two Bedroom: 6 Units
Three Bedroom: 0 Units

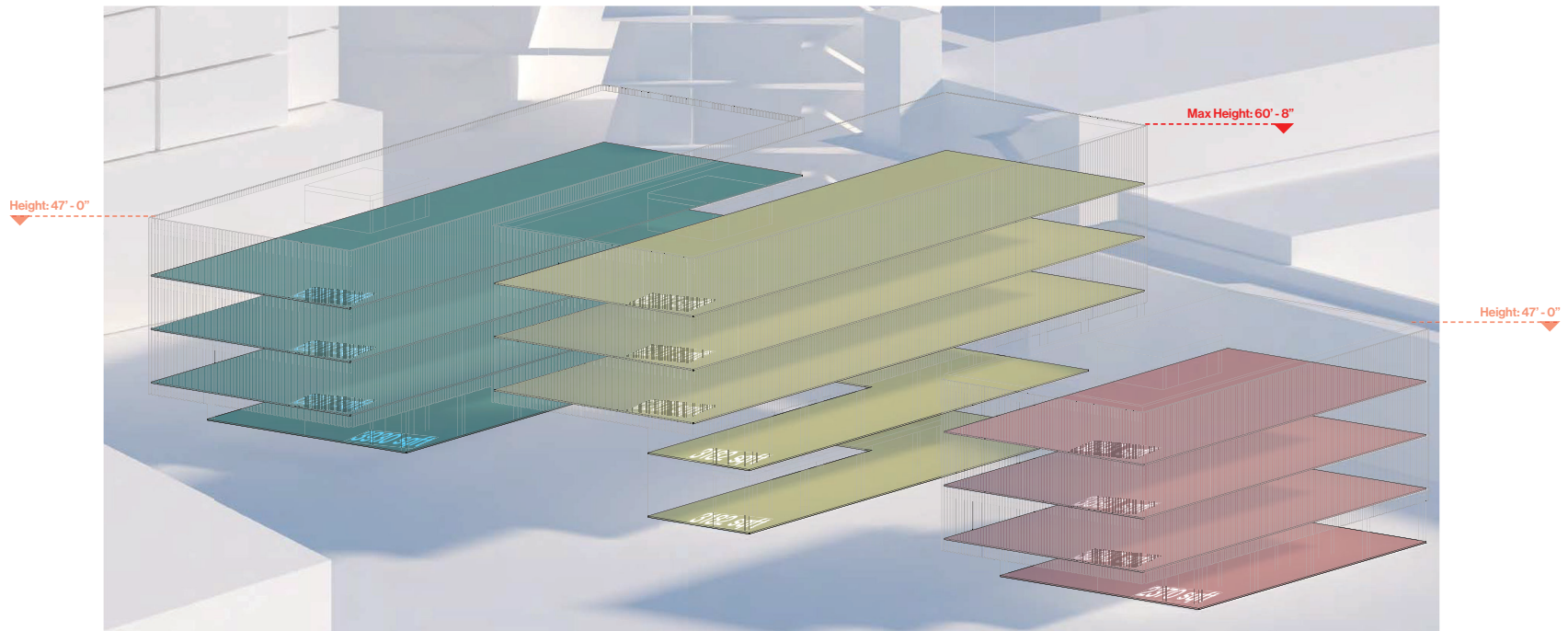
Total Units: 8 Units

Complex Total Units

Studio: 18 Units
Two Bedroom: 21 Units
Three Bedroom: 3 Units

Total Units: 41 Units

Gross Square Footage



Building A

Total Area: 22,551 sqft
Max Height: 78' - 0"
Stories: 4

Building B

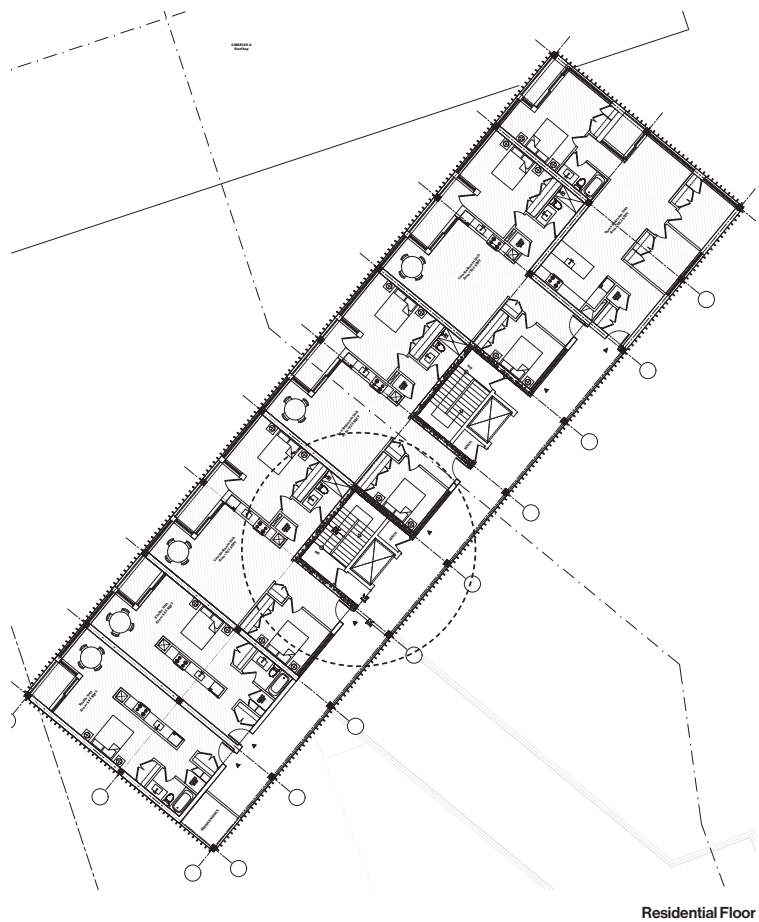
Total Area: 24,985 sqft
Max Height: 60' - 8"
Stories: 5

Building C

Total Area: 14,049 sqft
Max Height: 78' - 0"
Stories: 4

Building A,B,C

Total Area: 61,585 sqft



Residential Floor

Occupant Load Calculation

Required by CDC:
Clearances

Stairs

of Fire-Proof Enclosed Egress = 2 (CBC 1006.3.2)
Stairway Width Min.= 44" Wide (CBC 1011.2)

Corridor (CDC 1020.2)

Width of Corridor Min.= 44" Wide (CBC 1020.2)

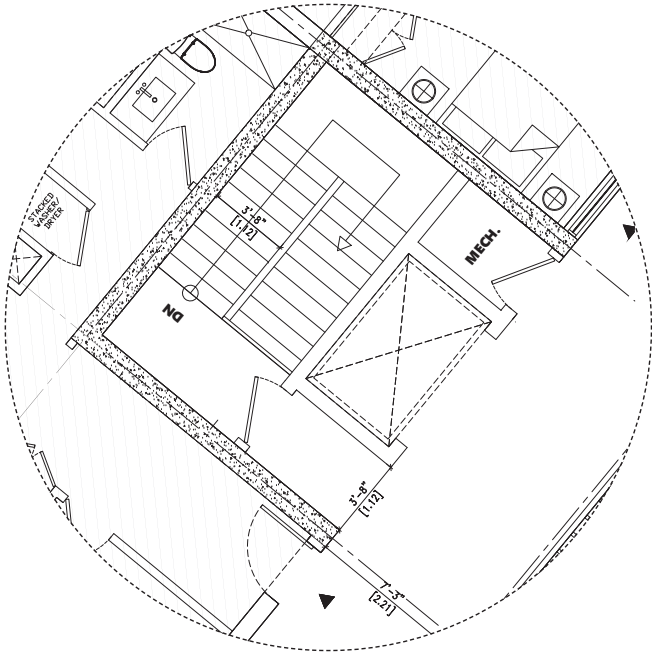
Proposed in Design:
Clearances

Stairs

of Fire-Proof Enclosed Egress = 2 (CBC 1006.3.2)
Stairway Width= 44" Wide (CBC 1011.2)

Corridor (CDC 1020.2)

Width of Corridor= 87" Wide (CBC 1020.2)



Residential Floor Egress Callout



Ground Floor



Second Floor



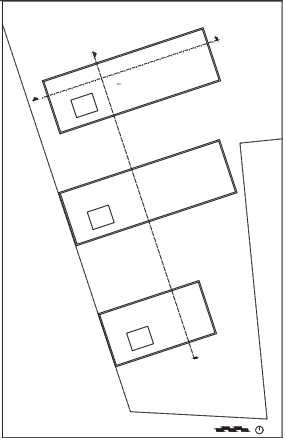
Third Floor



Fourth Floor



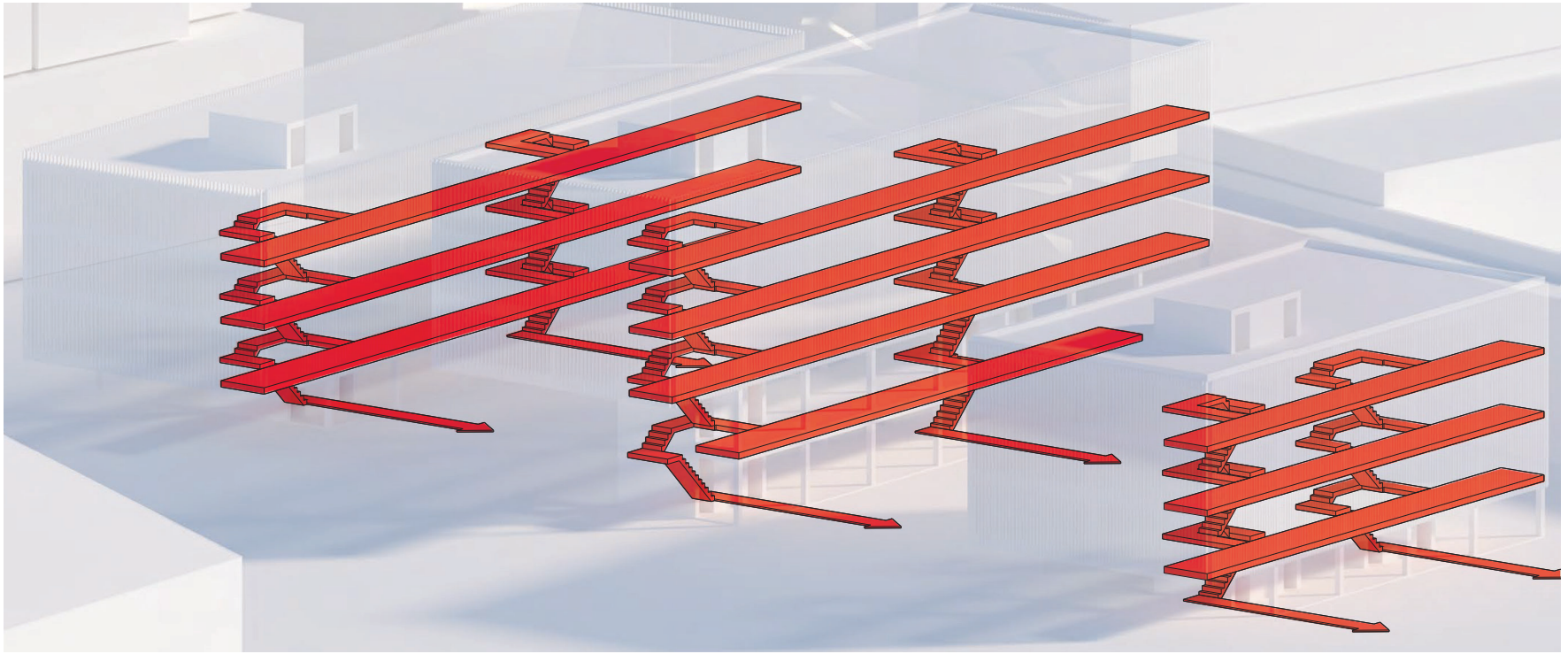
Fifth Floor



Sixth Floor

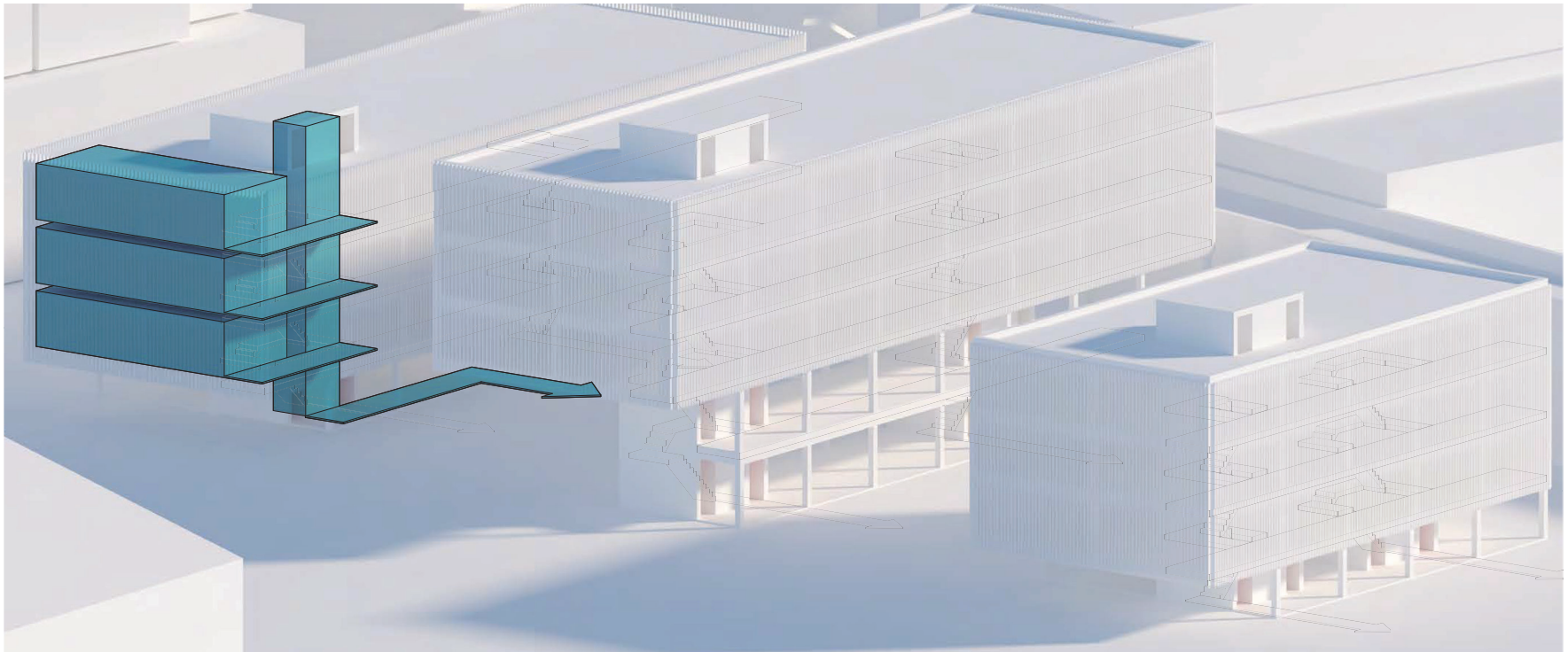
Means of Egress

Means of Egress



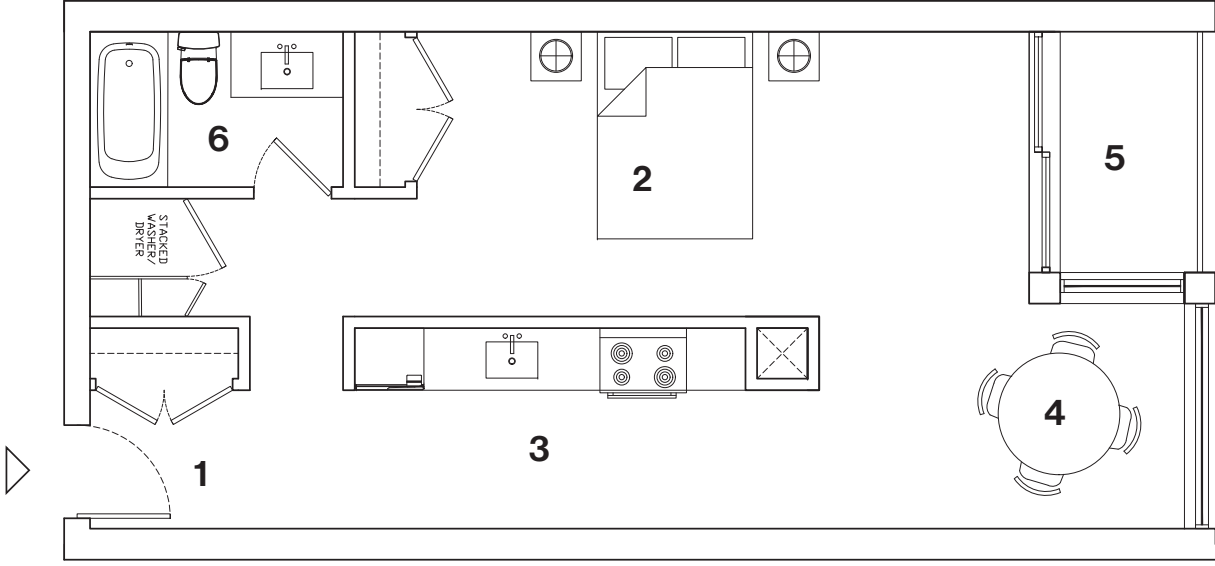
Egress

Accessible Path of Travel



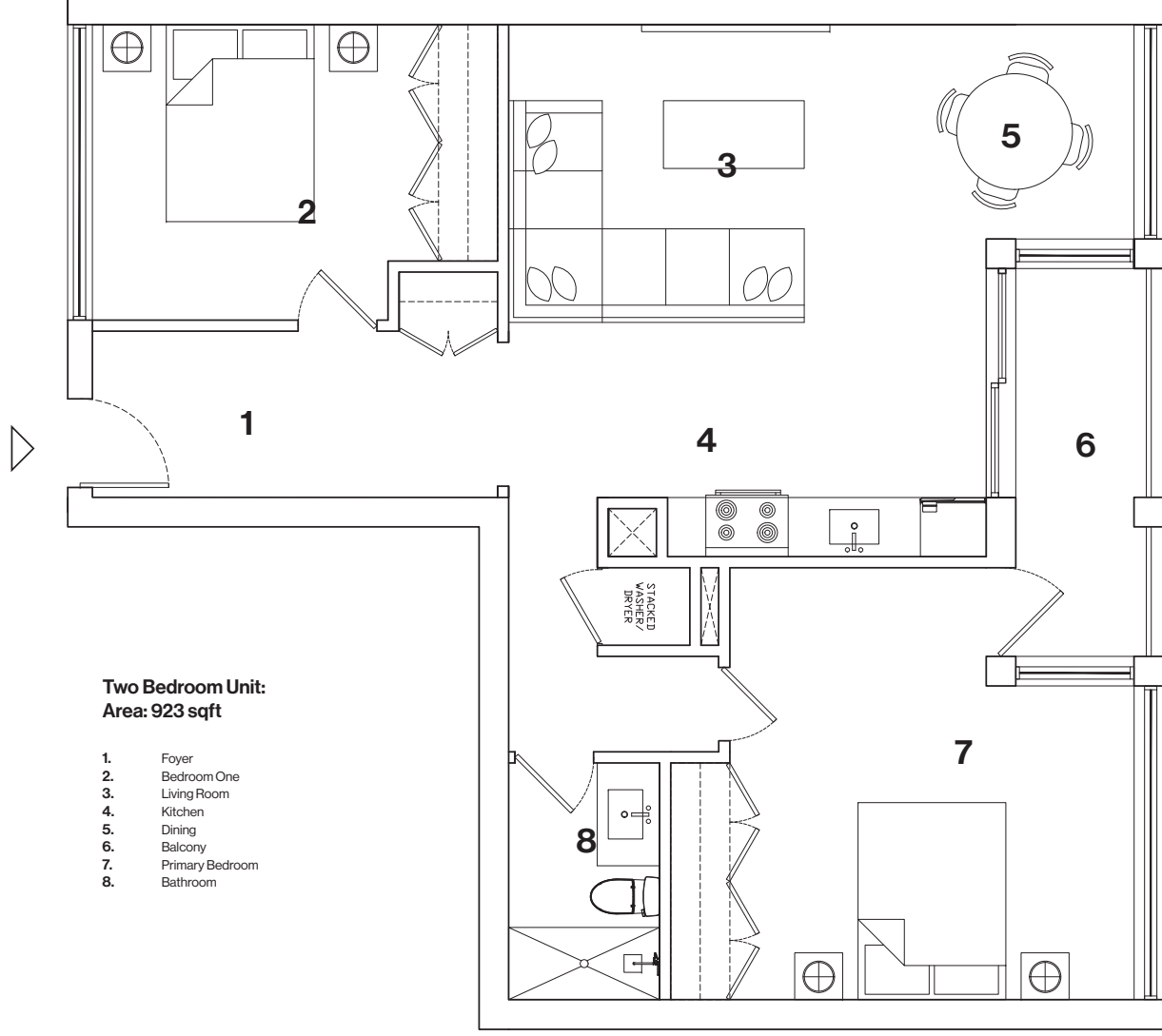
Axonometric Diagram

Units
Common and Accessible



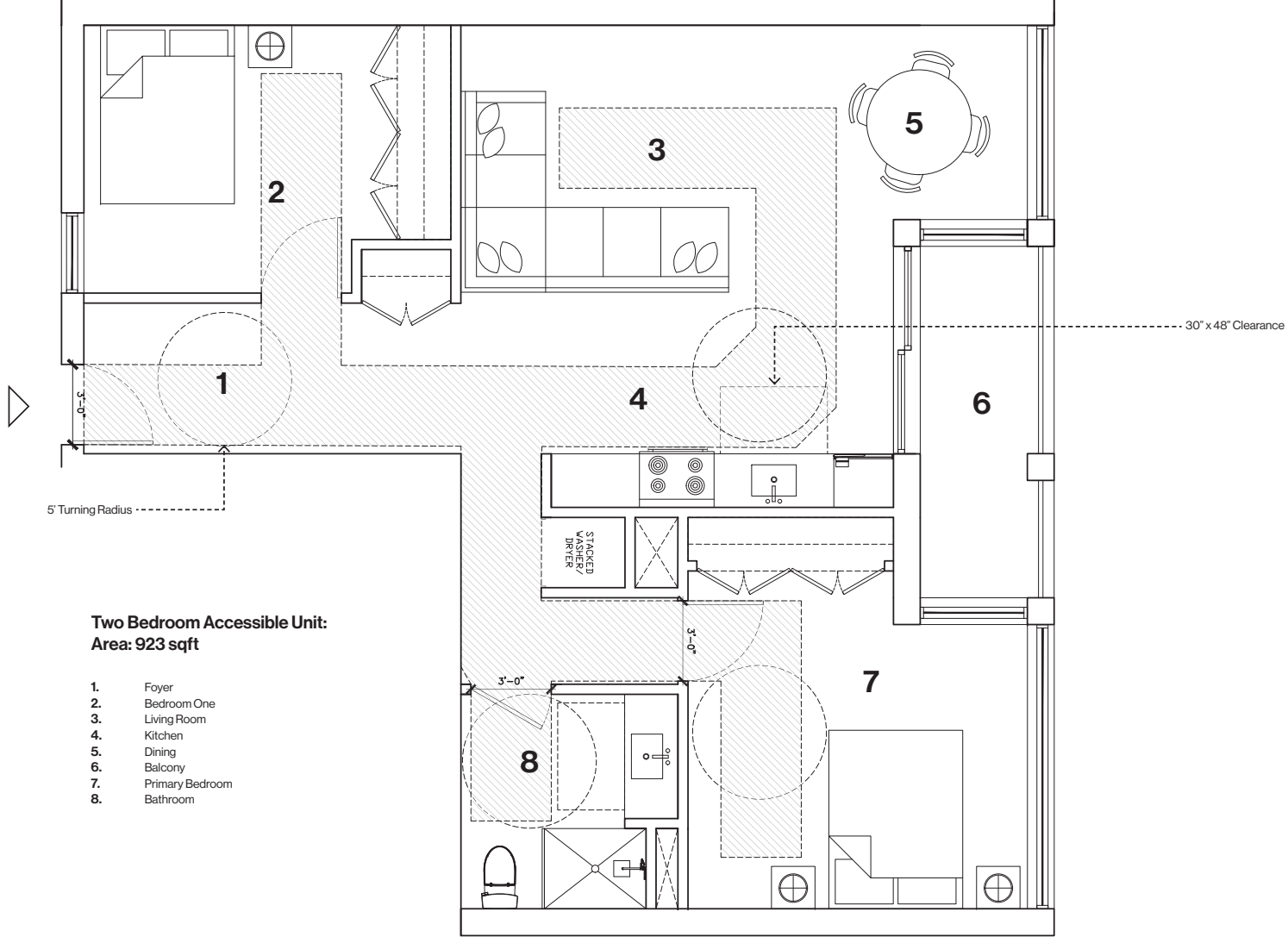
Studio Unit:
Area: 563 sqft

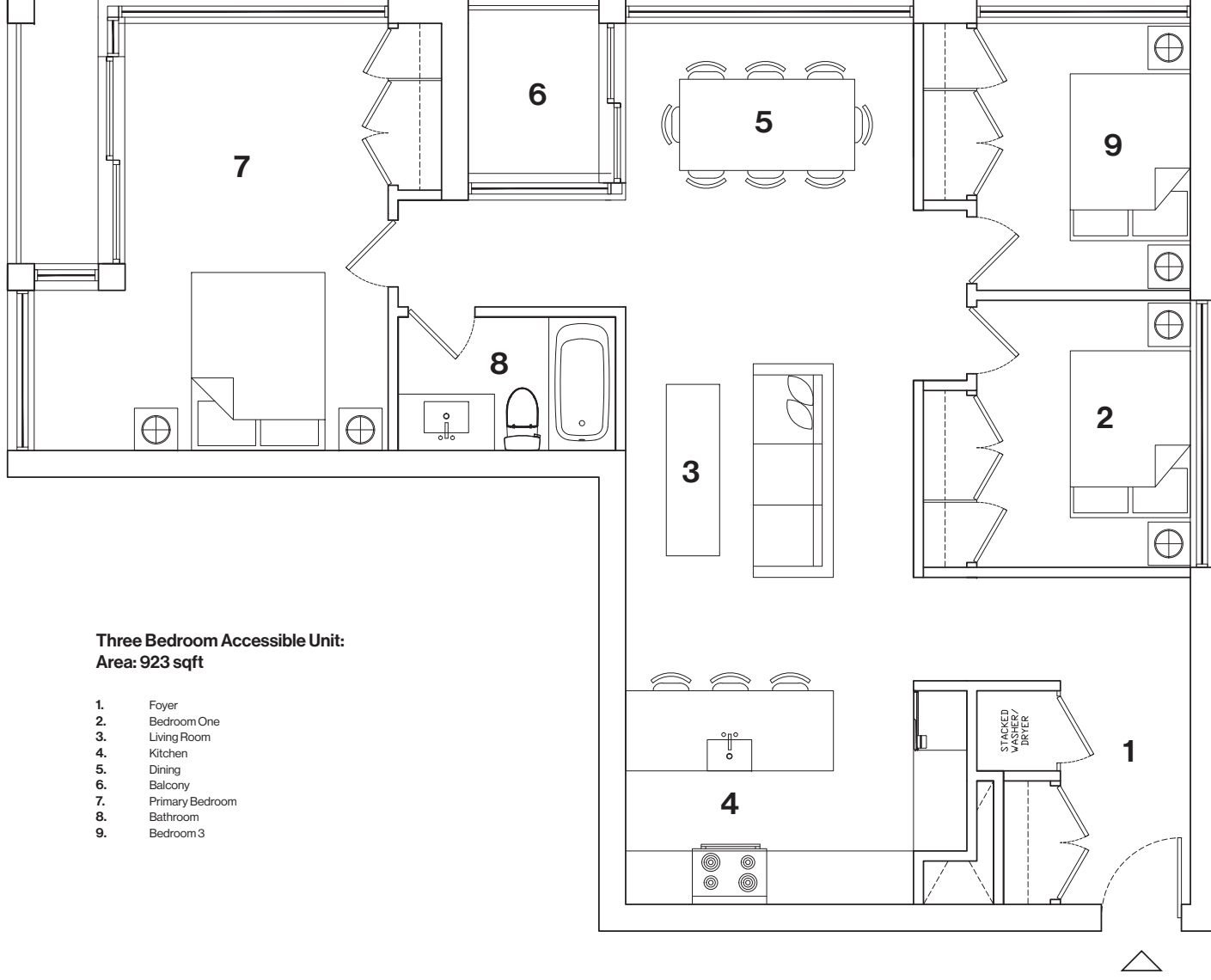
- 1. Foyer
- 2. Bedroom One
- 3. Kitchen
- 4. Dining
- 5. Balcony
- 6. Bathroom



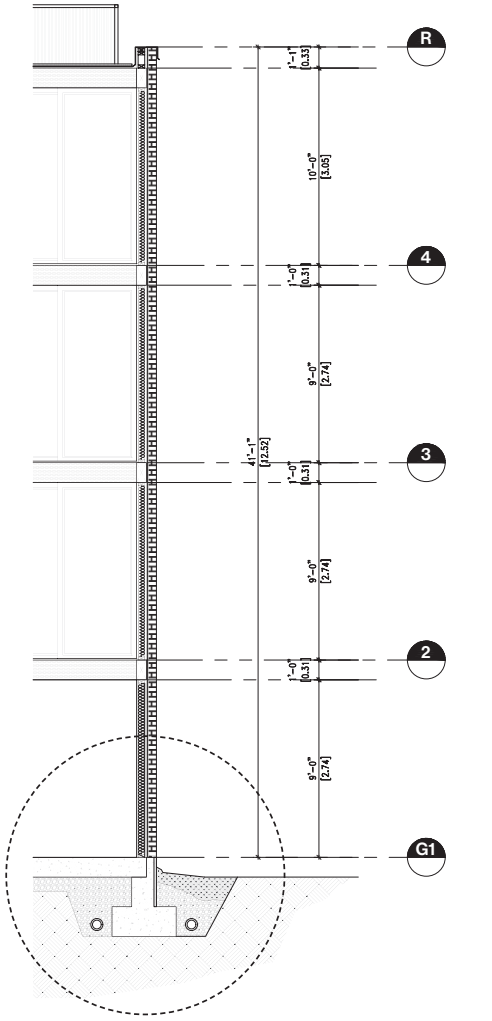
Two Bedroom Unit:
Area: 923 sqft

- 1. Foyer
- 2. Bedroom One
- 3. Living Room
- 4. Kitchen
- 5. Dining
- 6. Balcony
- 7. Primary Bedroom
- 8. Bathroom

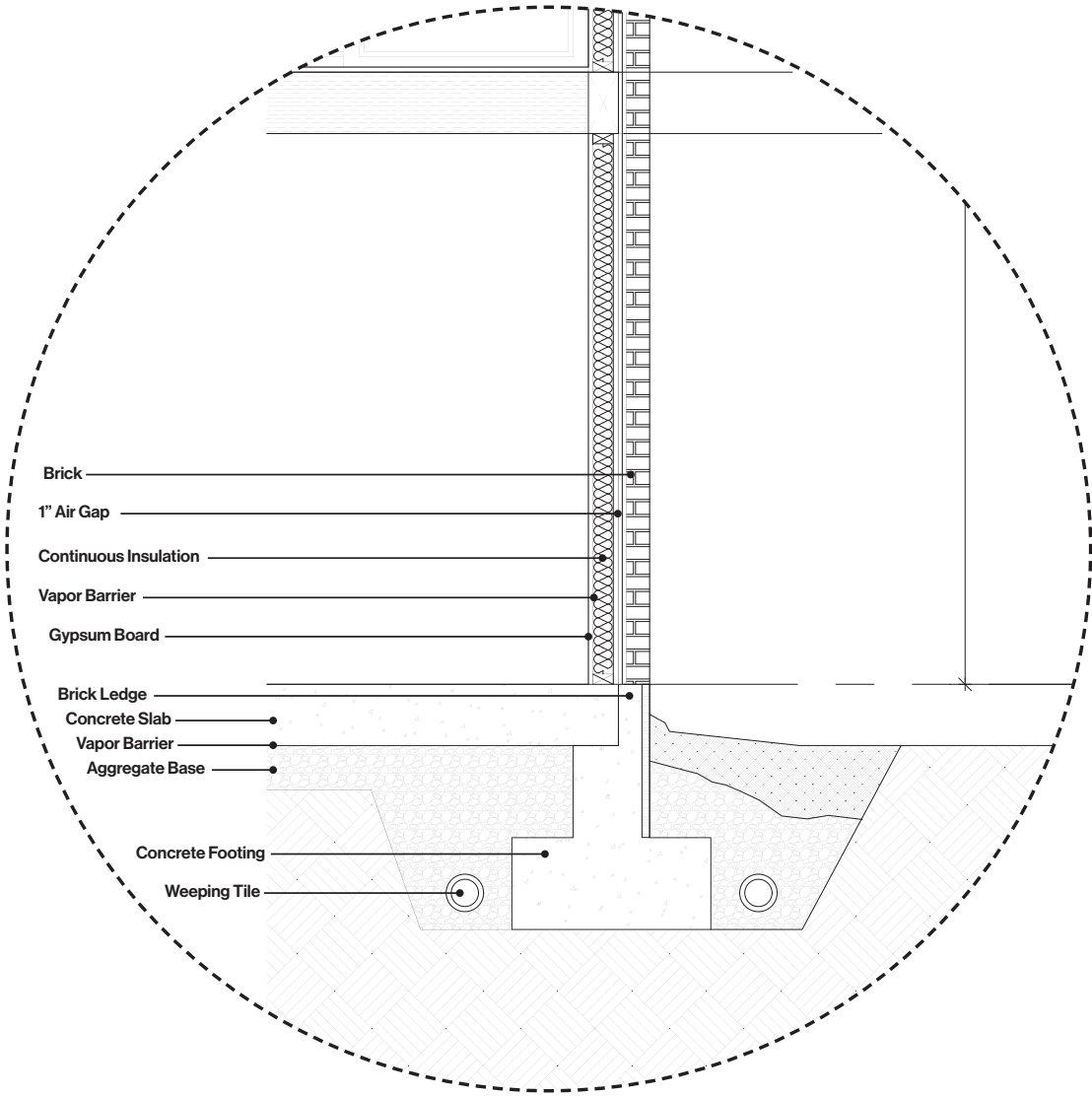




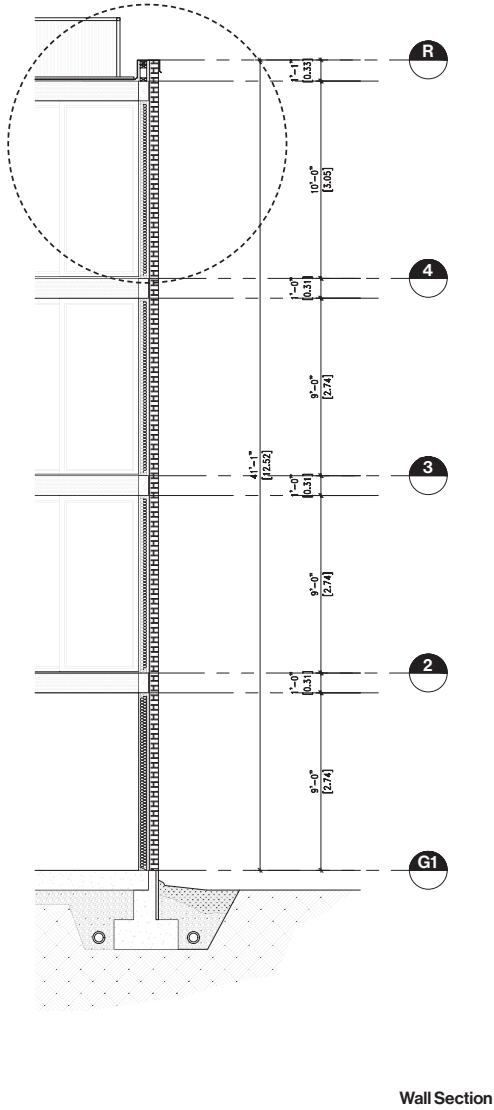
Building Envelope
Section Detail and Assembly



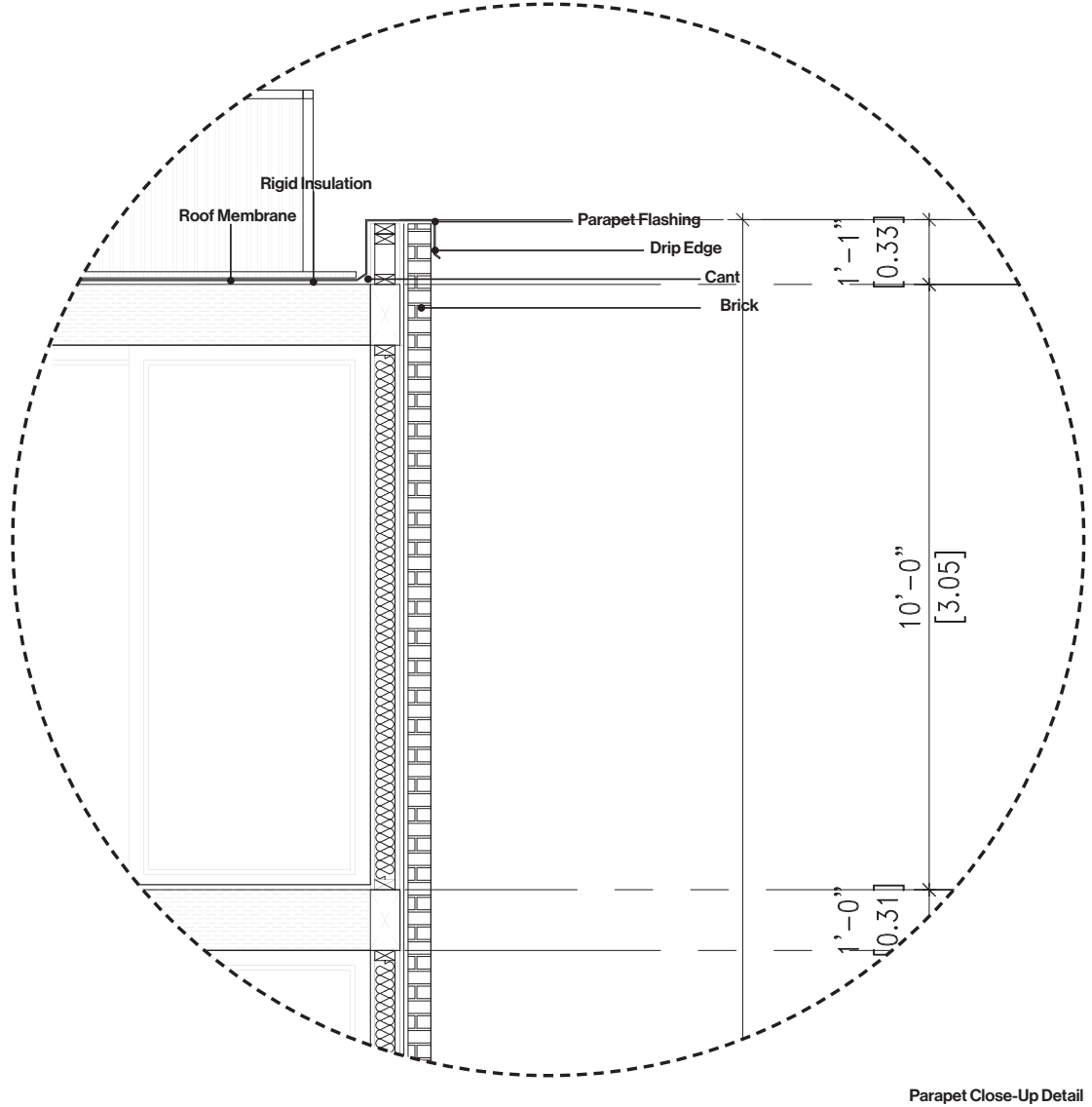
Wall Section



Foundation Close-Up Detail



Wall Section



Parapet Close-Up Detail

Precedent Analysis

59 Dwellings, Neppert Gardens, Mulhouse, France

Module 3.4



INITIAL SUMMARY

TOPICS

| | |
|-------------------------|------|
| Introduction | |
| Project Stats | 3-4 |
| Location | |
| Urban Context | 5 |
| Site Context | 6 |
| Design | |
| Design Concept | 7-8 |
| Floorplans and Sections | 9-12 |
| Conclusion | |
| Key Takeaways | 13 |



Introduction



Site Context Diagram

Project Stats

Year of Completion: 2015
Location: Mulhouse, France
Area: 8,820 m²
Size: 250,000 SQFT
Units: 59 Social Housing Units
Architects: Anne Lacaton & Jean-Philippe Vassal
Cost: 5,750,000.00 €

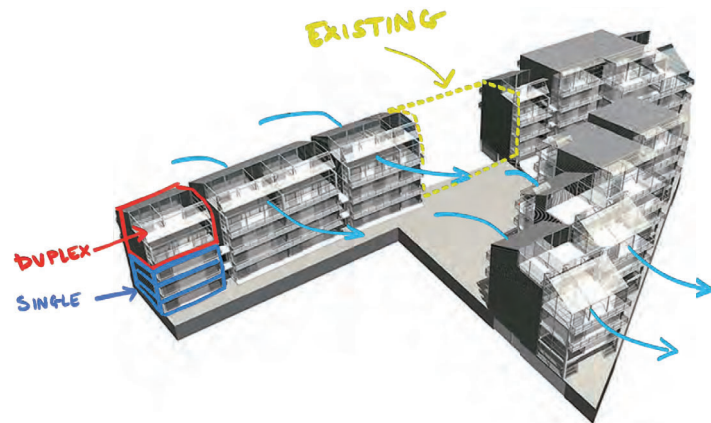
Purpose

- Social Rental Units
- Create dwellings larger than the standard
- Bring collective housing as close to individual housing as possible, utilizing outdoor areas that expand interior spaces
- Optimize housing based on plot size

References:

59 dwellings, Neppert Gardens, Mulhouse: Lacaton & Vassal. Archello. (n.d.). <https://archello.com/project/59-dwellings-neppert-gardens-mulhouse>

Introduction



Building Axo

References:

59 dwellings, Neppert Gardens, Mulhouse: Lacaton & Vassal. Archello. (n.d.). <https://archello.com/project/59-dwellings-neppert-gardens-mulhouse>

Project Overview

Philosophy

- "Never demolish" – prioritize renovation over demolition

Objective

- Improve residents' quality of life by expanding and enhancing living spaces

Philosophy

- "Never demolish" – prioritize renovation over demolition

Social Impact

- Prevented displacement of residence in the area
- Provided more housing without increase in rent

Location



Urban Context

Mulhouse

- Industrial city located in northeastern France
- Known for its manufacturing and textile industries

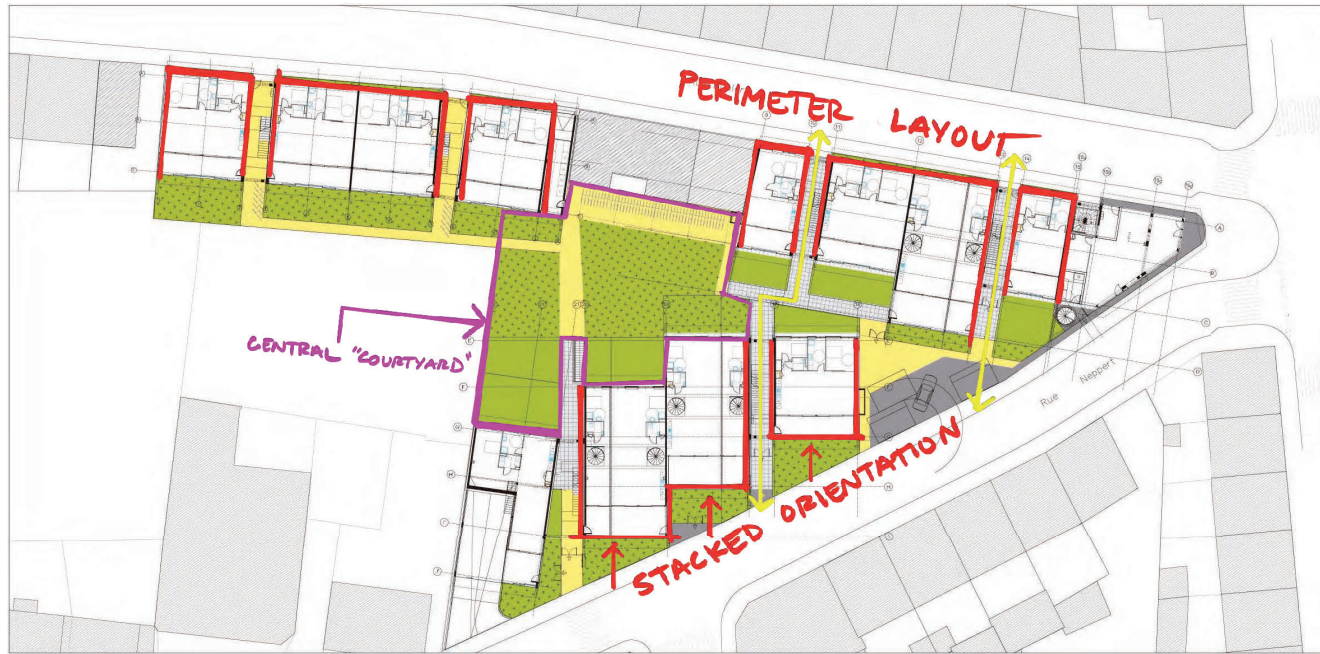
Neppert Gardens surrounding area

- Mostly residential
- Mixed with Post-war social housing developments

Economy

- Facing economic decline due to downturn in manufacturing
- Low income population

Site Plan



Unit Designs

- All units have a double orientation providing natural sunlight and cross ventilation
- Terrace and balcony provide a true winter garden

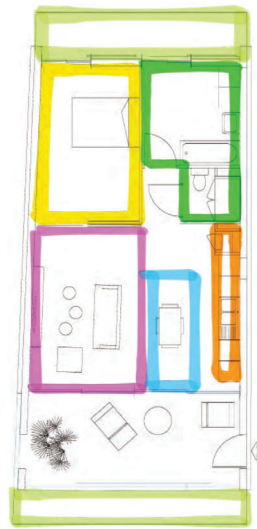
Unit Types

- Single Story (One Bedroom, Two Bedroom and Three Bedroom)
- Duplex (Two Bedrooms, Four Bedrooms)

References:

59 dwellings, Neppert Gardens, Mulhouse: Lacaton & Vassal. Archello. (n.d.). <https://archello.com/project/59-dwellings-neppert-gardens-mulhouse>

Floorplans



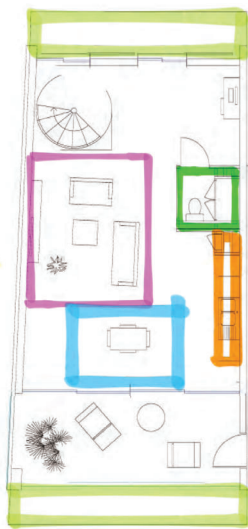
T2

T2

- 1 Bedroom
- 1 Bathroom
- Kitchen
- Living Room
- Dining
- Double Balcony

References:

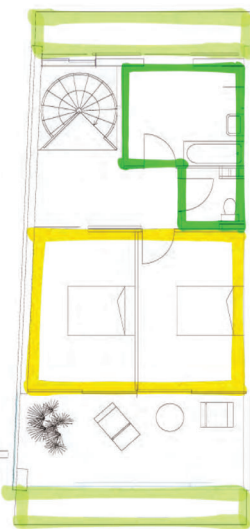
59 dwellings, Neppert Gardens, Mulhouse: Lacaton & Vassal. Archello. (n.d.). <https://archello.com/project/59-dwellings-neppert-gardens-mulhouse>



T3 DUPLEX

T3 Duplex

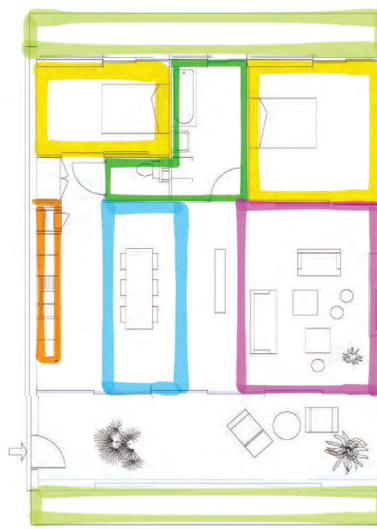
- 2 Bedroom
- 1.5 Bathroom
- Kitchen
- Living Room
- Dining
- Double Balcony on each floor



T3

T3

- 2 Bedroom
- 1.5 Bathroom
- Kitchen
- Living Room
- Dining
- Double Balcony



T4

T4

- 2 Bedroom
- 1.5 Bathroom
- Kitchen
- Living Room
- Dining
- Double Balcony

Drawings by "Lacaton + Vassal"

Floorplans



T3 Duplex

- 2 Bedroom
- 1.5 Bathroom
- Kitchen
- Living Room
- Dining
- Loft
- Double Balcony on each floor

T4

- 3 Bedroom
- 1 Bathroom
- Kitchen
- Living Room
- Dining
- Double Balcony

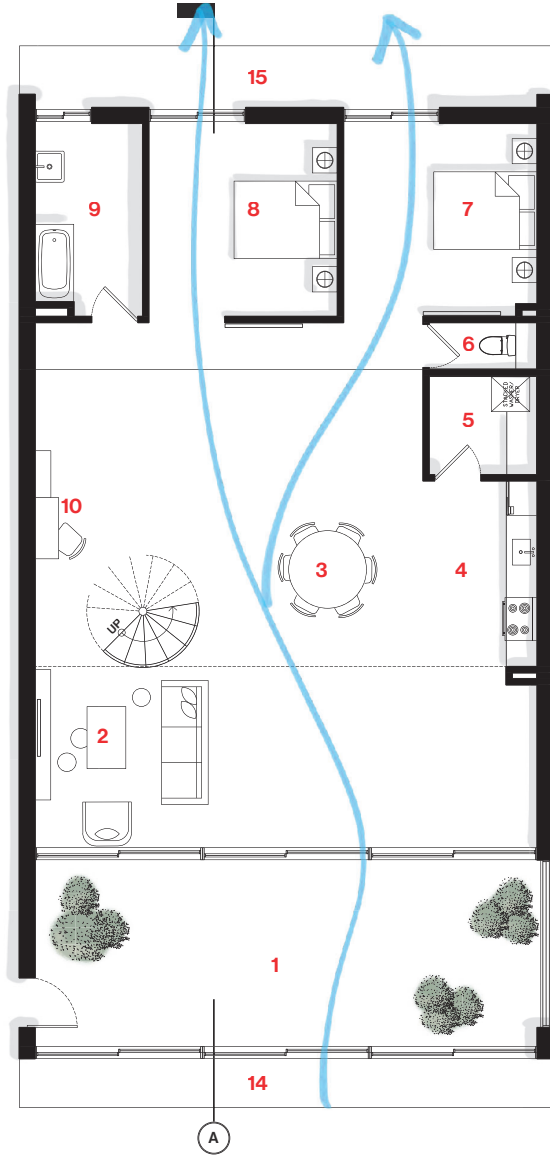
T5 Duplex

- 4 Bedroom
- 2 Bathroom
- Kitchen
- Living Room
- Dining
- Double Balcony

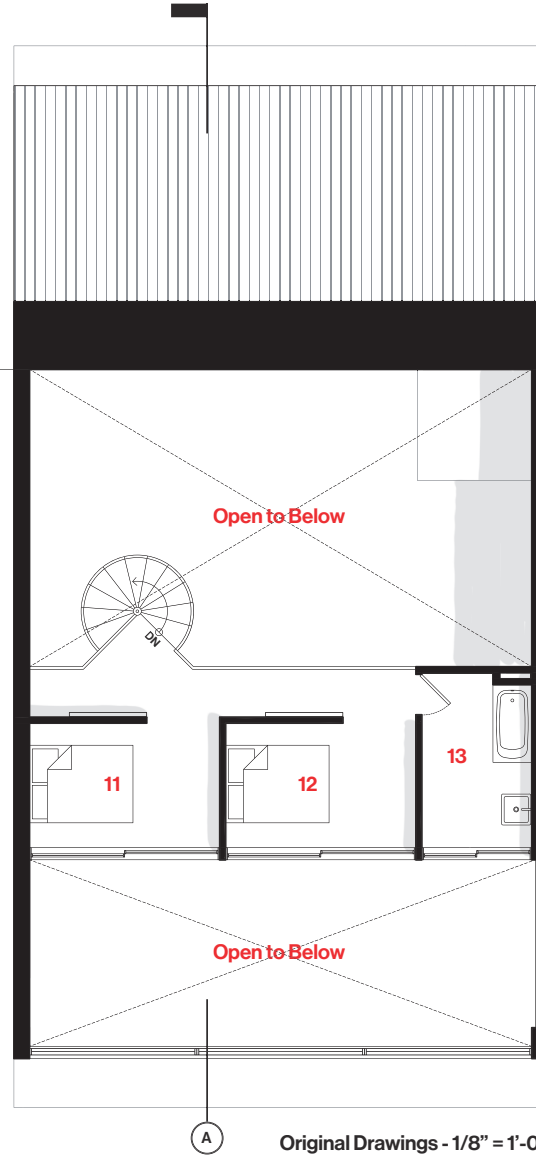
Drawings by "Lacaton + Vassal"

References:

59 dwellings, Neppert Gardens, Mulhouse: Lacaton & Vassal. Archello. (n.d.). <https://archello.com/project/59-dwellings-neppert-gardens-mulhouse>



Floorplans Study

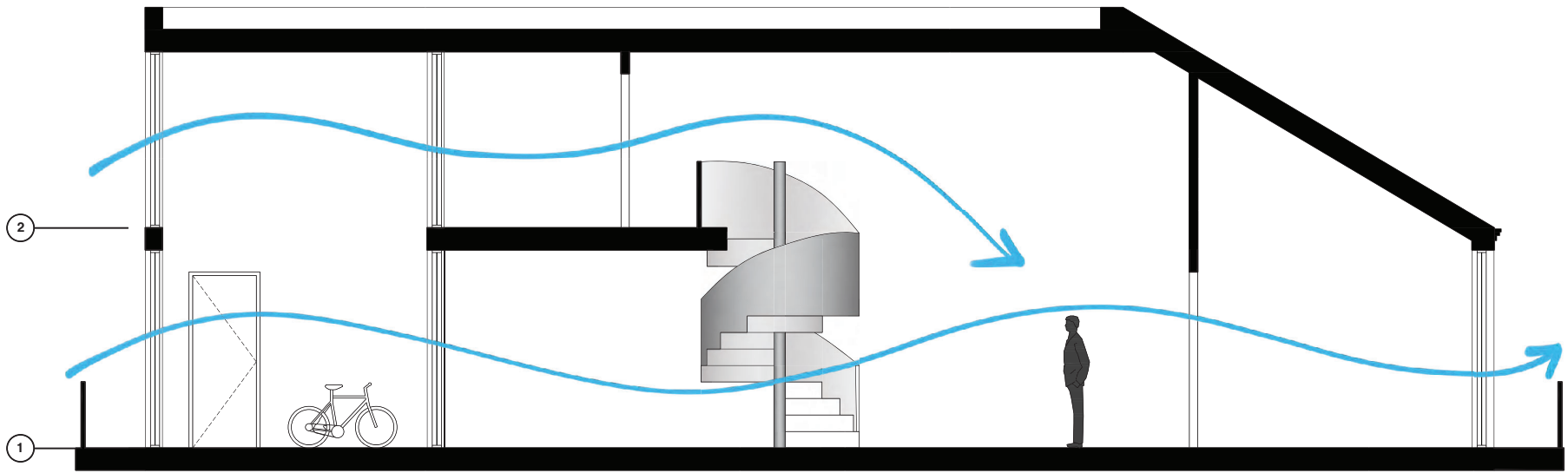


Original Drawings - 1/8" = 1'-0"

T5 Duplex

1. Winter Garden/Foyer
2. Living Room
3. Dining
4. Kitchen
5. Laundry
6. Toilet Room
7. Bedroom One
8. Bedroom Two
9. Bathroom One
10. Office
11. Bedroom Three
12. Bedroom Four
13. Bathroom 2
14. Balcony One
15. Balcony Two

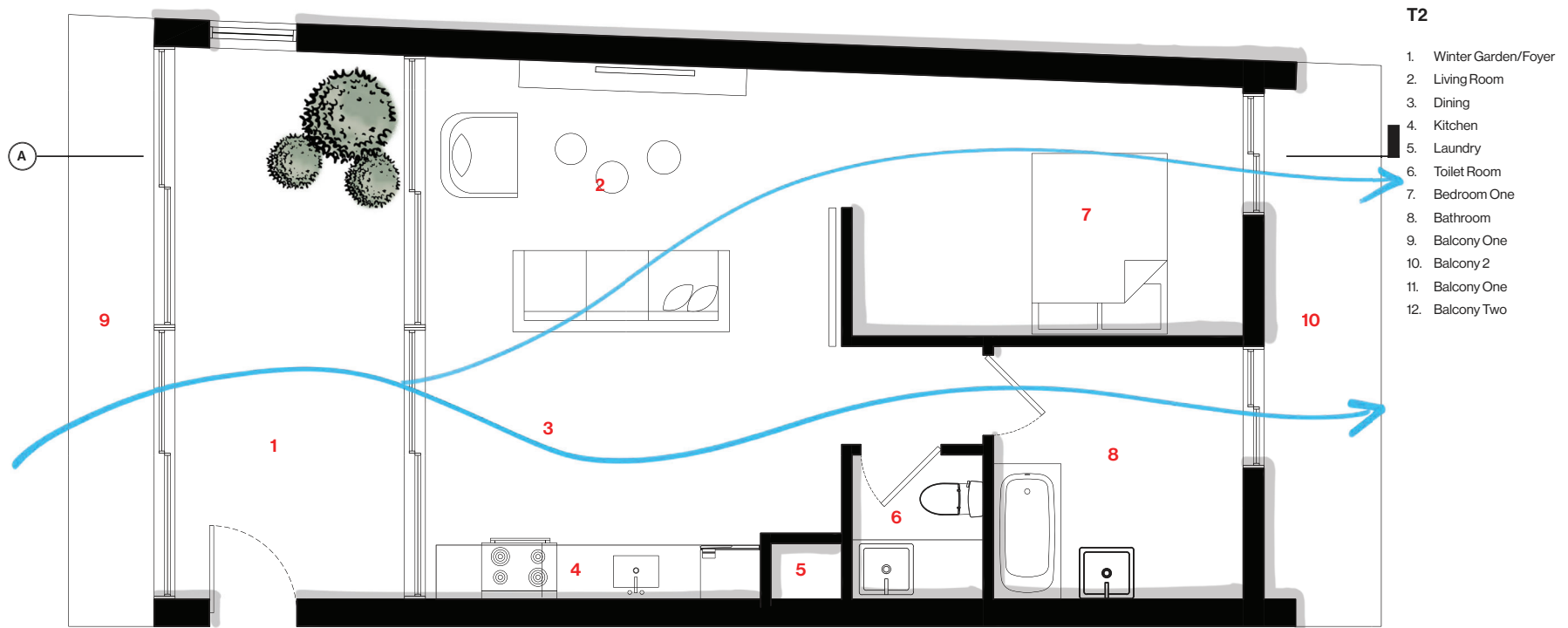
Floorplans Study



Section A - T5 Duplex

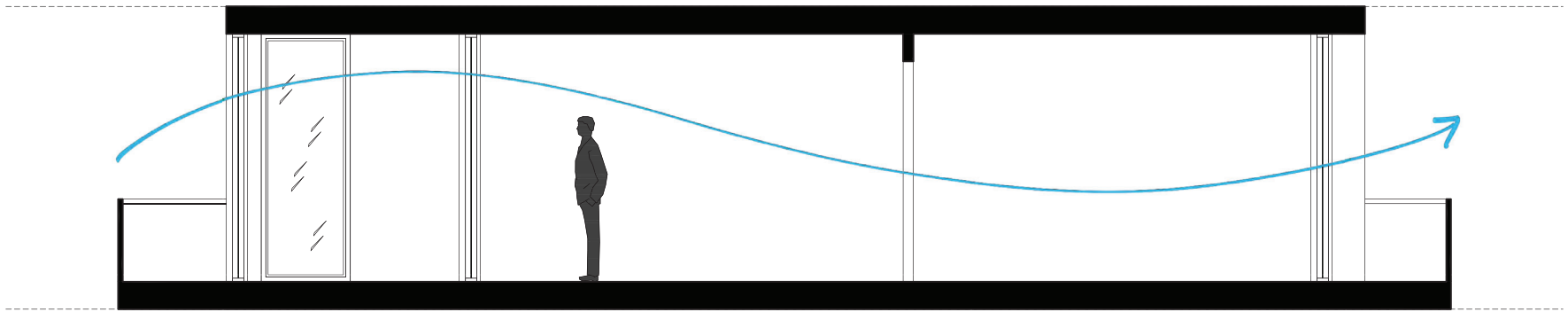
Original Section Drawing - 1/8" = 1'-0"

Floorplans Study



Original Drawings - 1/8" = 1'-0"

Floorplans Study



Section A - T2

Original Section Drawing - 1/8" = 1'-0"

Conclusion



Key Takeaways & Lessons

Betterment without Inflation

With the addition of this complex, residents in the area can have features like winter gardens and balconies, which in the end can improve quality of life, without an increased price tag. This project shows that affordable housing can be both spacious, bright and comfortable.

Natural Light and Ventilation

Thanks to its design, there is an abundance of natural light in the units, as well as natural ventilation, in which both can decrease energy consumption.

Conclusion

These lessons emphasize how well thought out, sustainable designs can create a high-quality standard at a low cost. By taking these lessons, we can design affordable housing that respects its users and the environment.

Schematic Design Package

PE3



INITIAL SUMMARY

TOPICS

Site & Massing

Massing and Circulation

Site Context

Site Plan

Project Circulation

Gross Area

Egress

Path of Accessibility

Programming

Sustainability

4

5

6

7

8

9

10

11

Structure

Construction Types & Fire Rating

Structural Design

Structural Plans

Sections (Passive and Active Systems)

Structural Diagram

Perspective Section

Details

13

14-19

20-21

22

23

24-25

Units

Unit Types

Studio Unit

Two Bedroom Unit

Accessible Two Bedroom Unit

Three Bedroom

27

28

29

30

Study Model

Photographs + Renders

Exterior Perspective

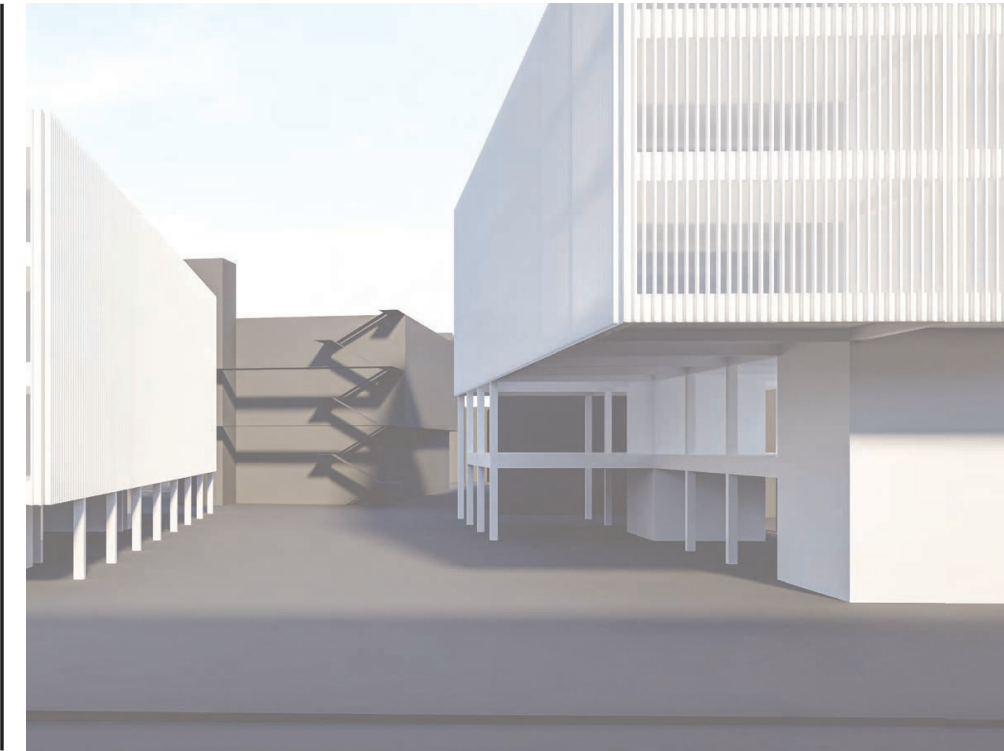
Light Study

Physical Model

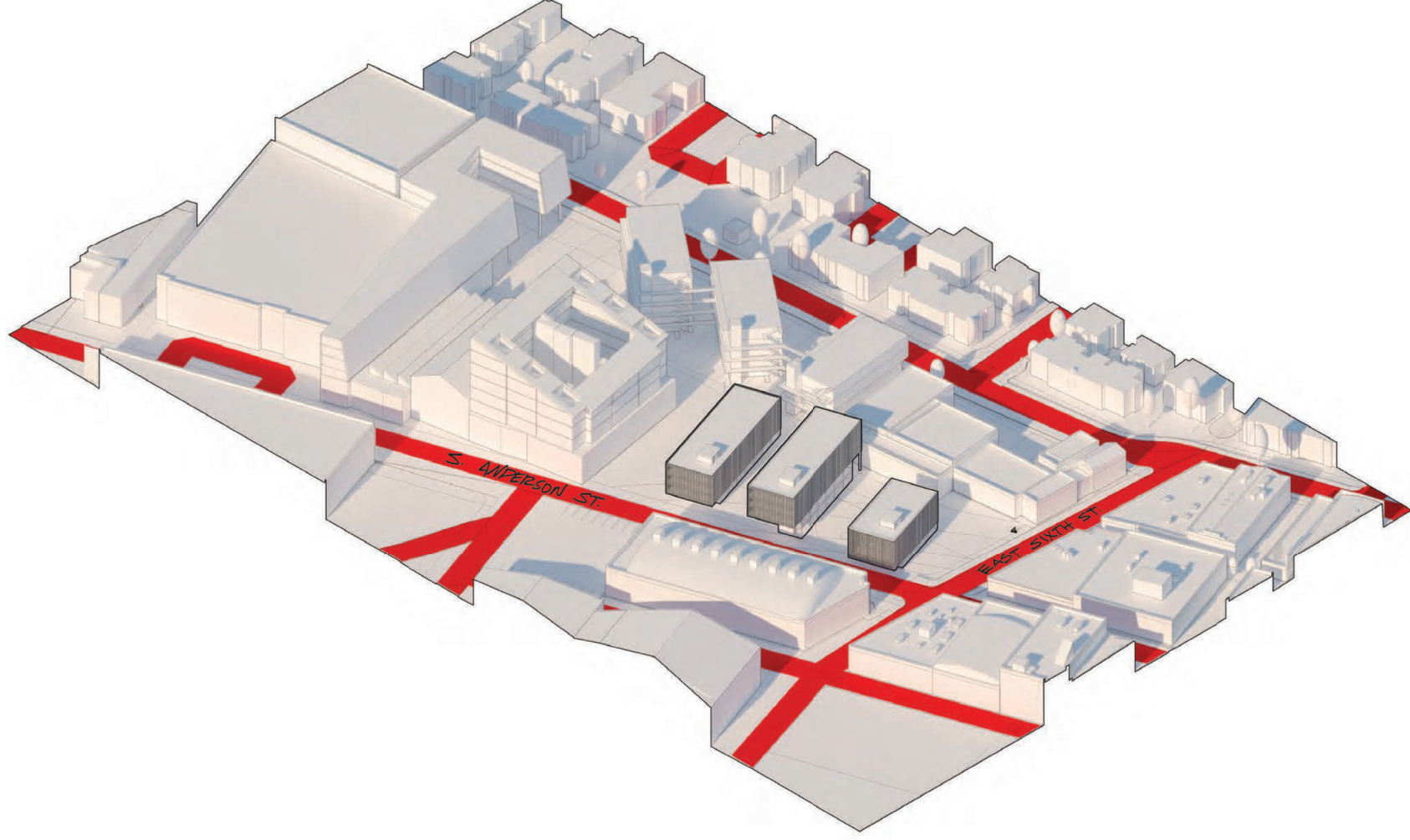
32-33

34

35



Site & Massing
Massing and Circulation



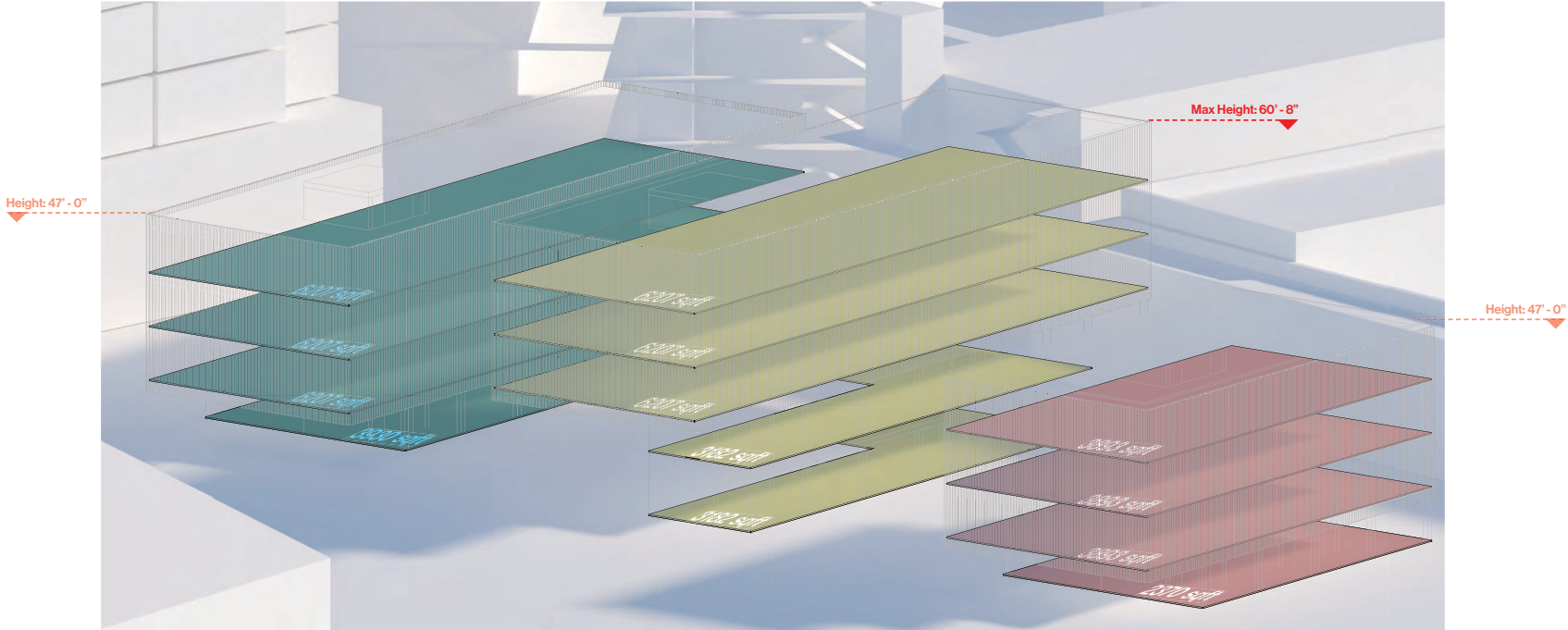


Site Plan



Site Circulation

Gross Square Footage



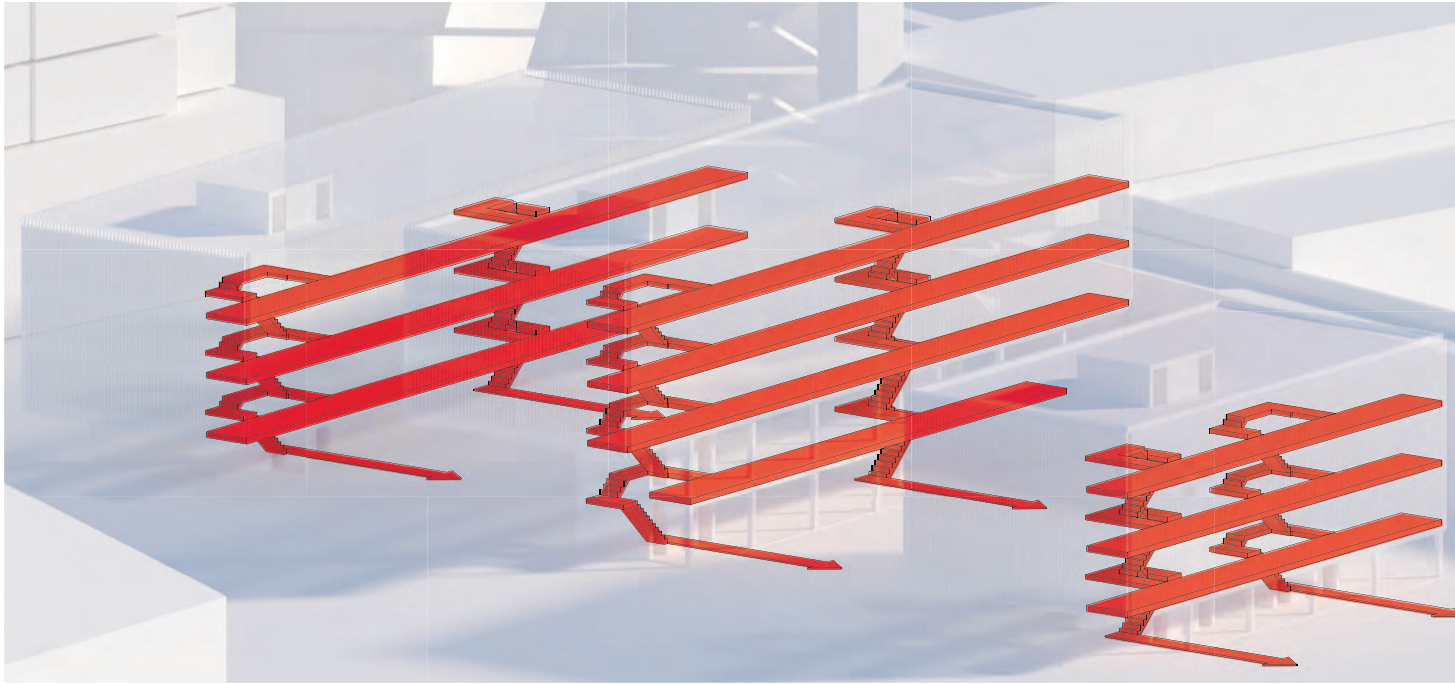
Building A
Total Area: 22,551 sqft
Max Height: 78' - 0"
Stories: 4

Building B
Total Area: 24,985 sqft
Max Height: 60' - 8"
Stories: 5

Building C
Total Area: 14,049 sqft
Max Height: 78' - 0"
Stories: 4

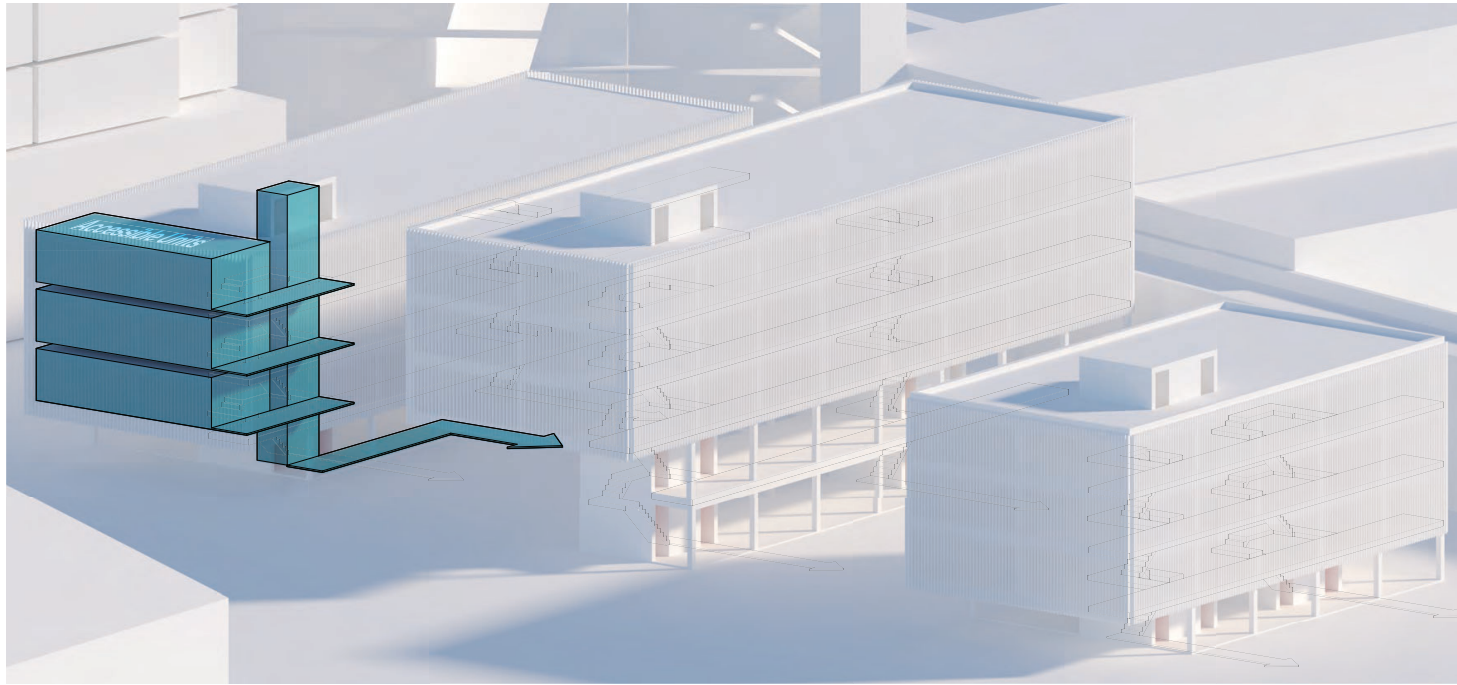
Building A,B,C
Total Area: 61,585 sqft

Means of Egress



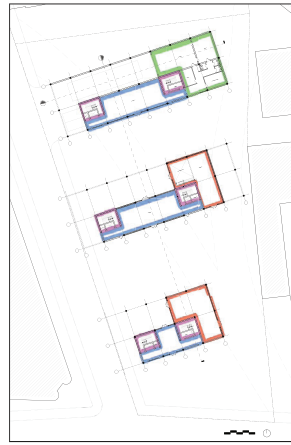
Egress

Accessibility



Accessible Path of Travel

Programmatic Organization



Ground Floor

ADMINISTRATION
PRIVATE
CIRCULATION
PUBLIC
RESIDENCES



Second Floor

ADMINISTRATION
PRIVATE
CIRCULATION
PUBLIC
RESIDENCES



Third Floor

ADMINISTRATION
PRIVATE
CIRCULATION
PUBLIC
RESIDENCES

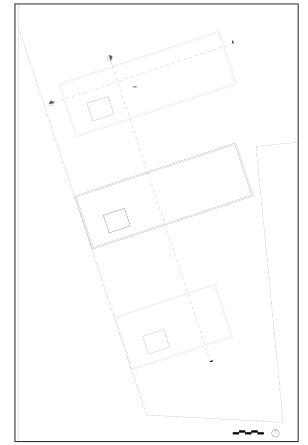


Fourth Floor

ADMINISTRATION
PRIVATE
CIRCULATION
PUBLIC
RESIDENCES

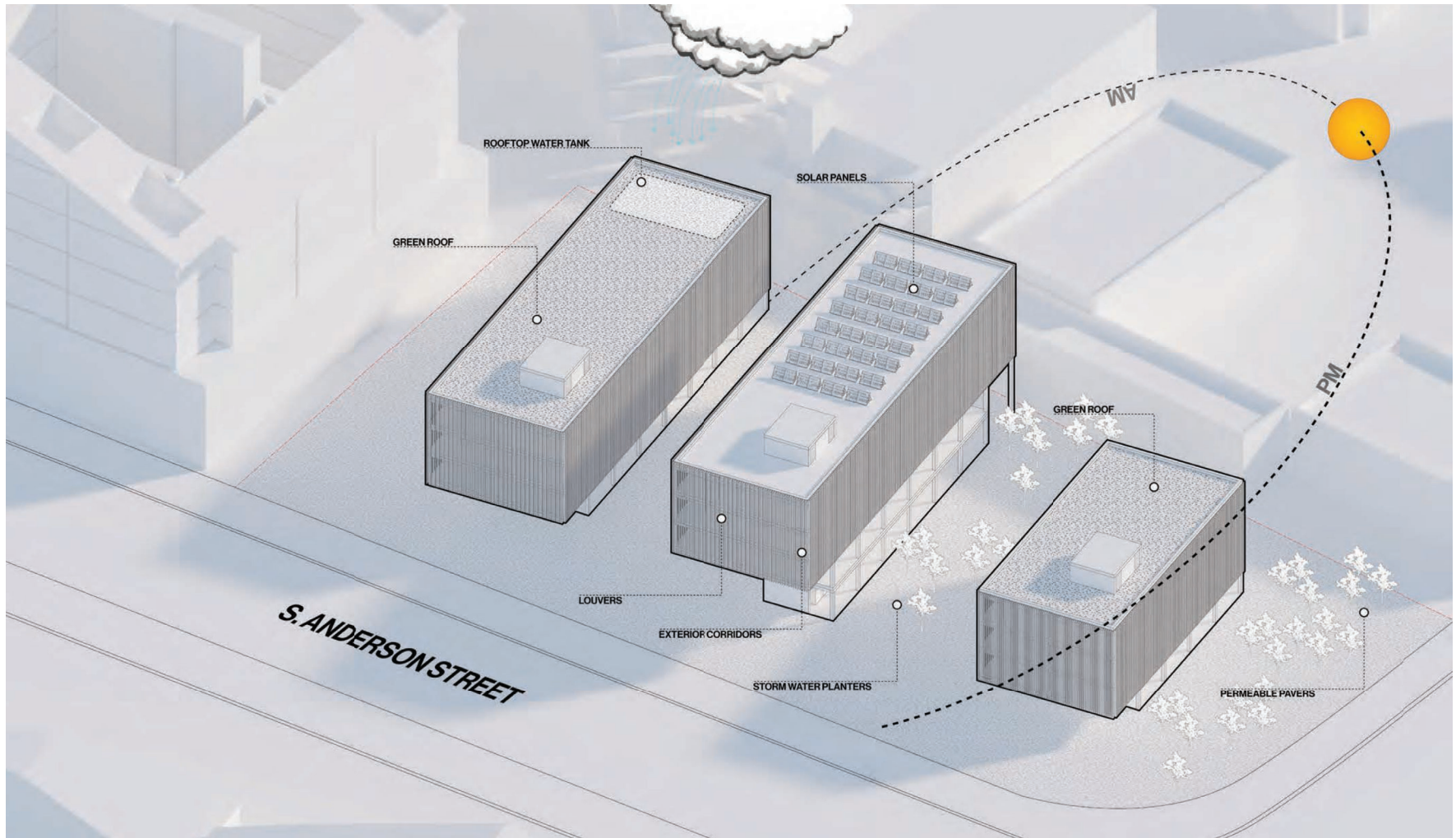


Fifth Floor



Sixth Floor

Sustainable Design

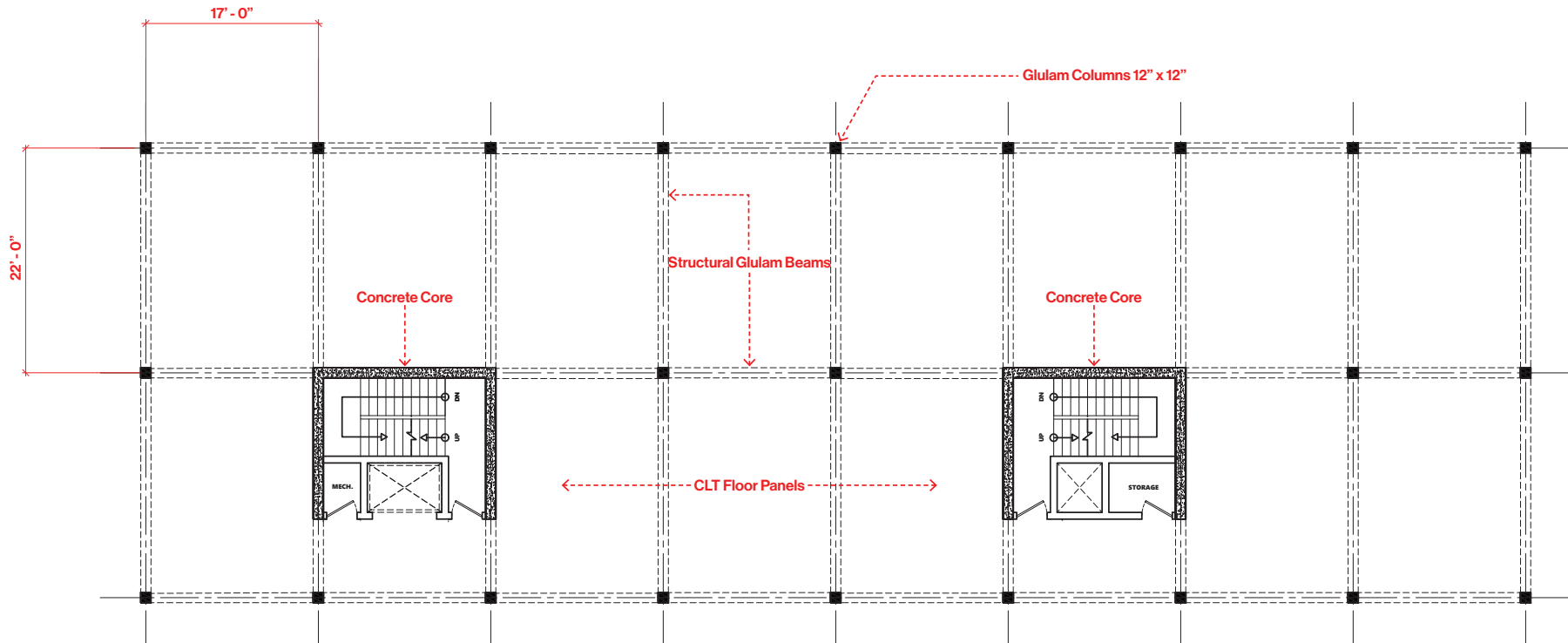


Sustainable Design Isometric Diagram

Structure
Construction Types and Fire Rating

Standard Structural Sample

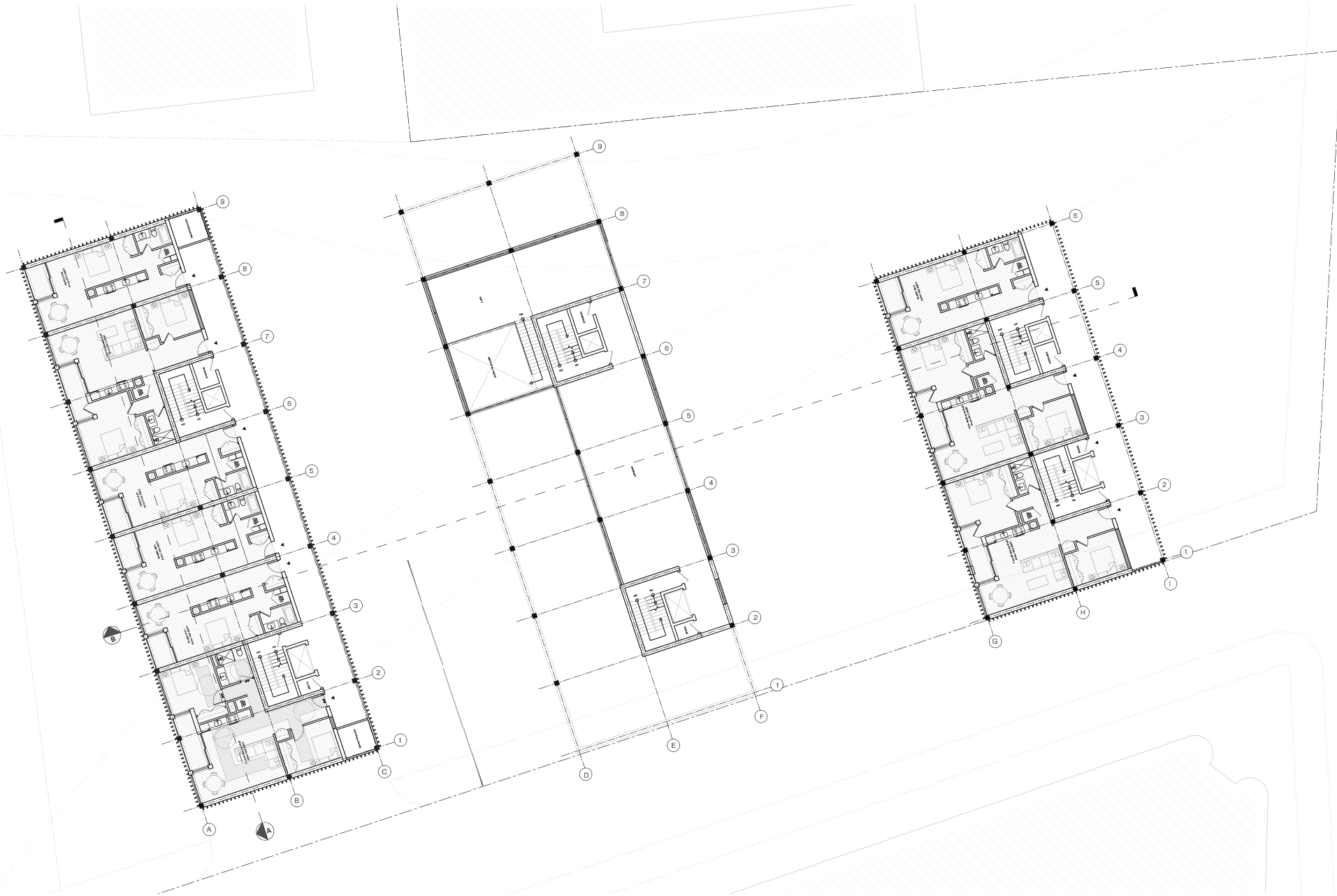
Structural Elements: Mass Timber Construction



Floor Assembly Sample



Ground Floor



Second Floor



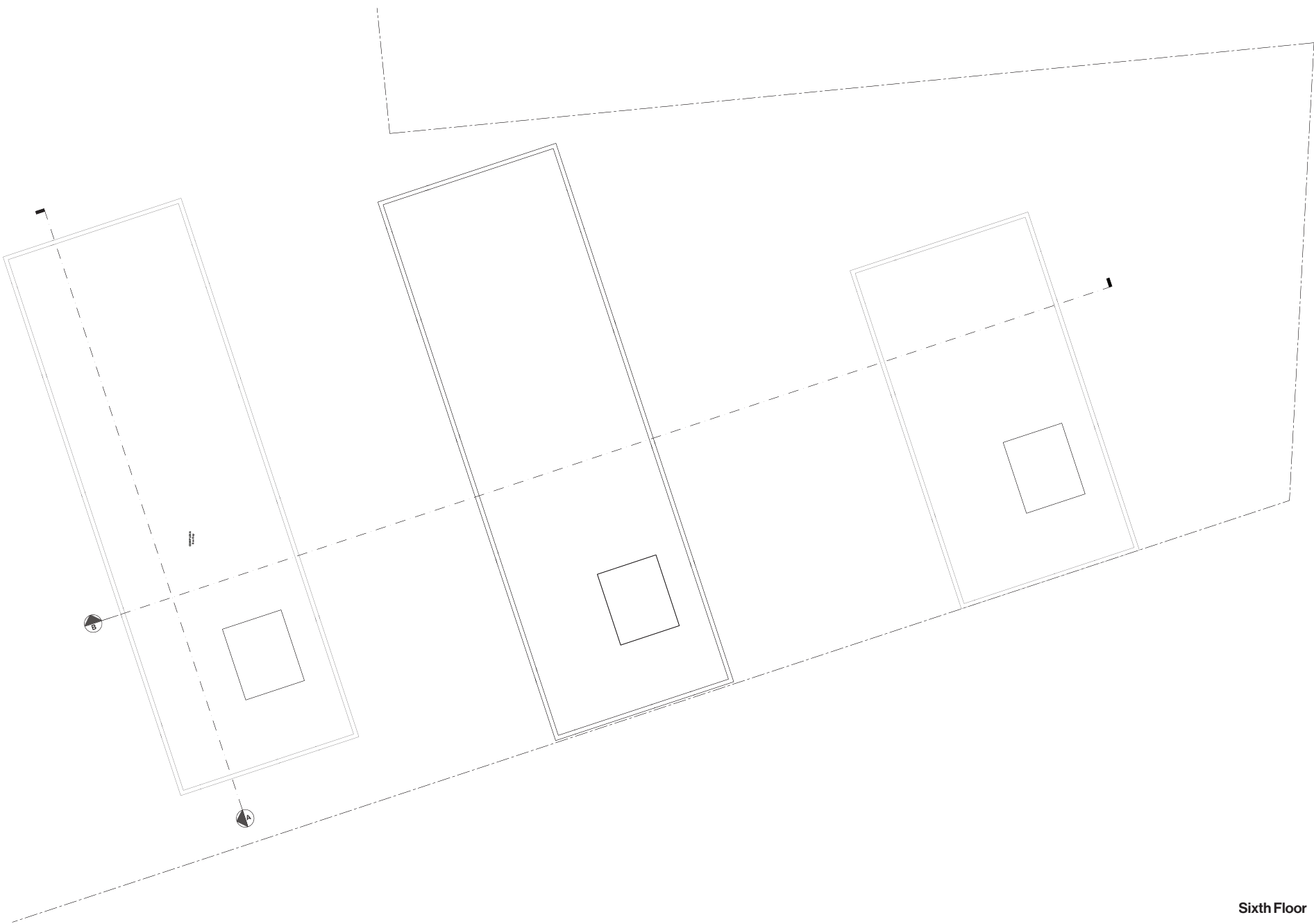
Third Floor



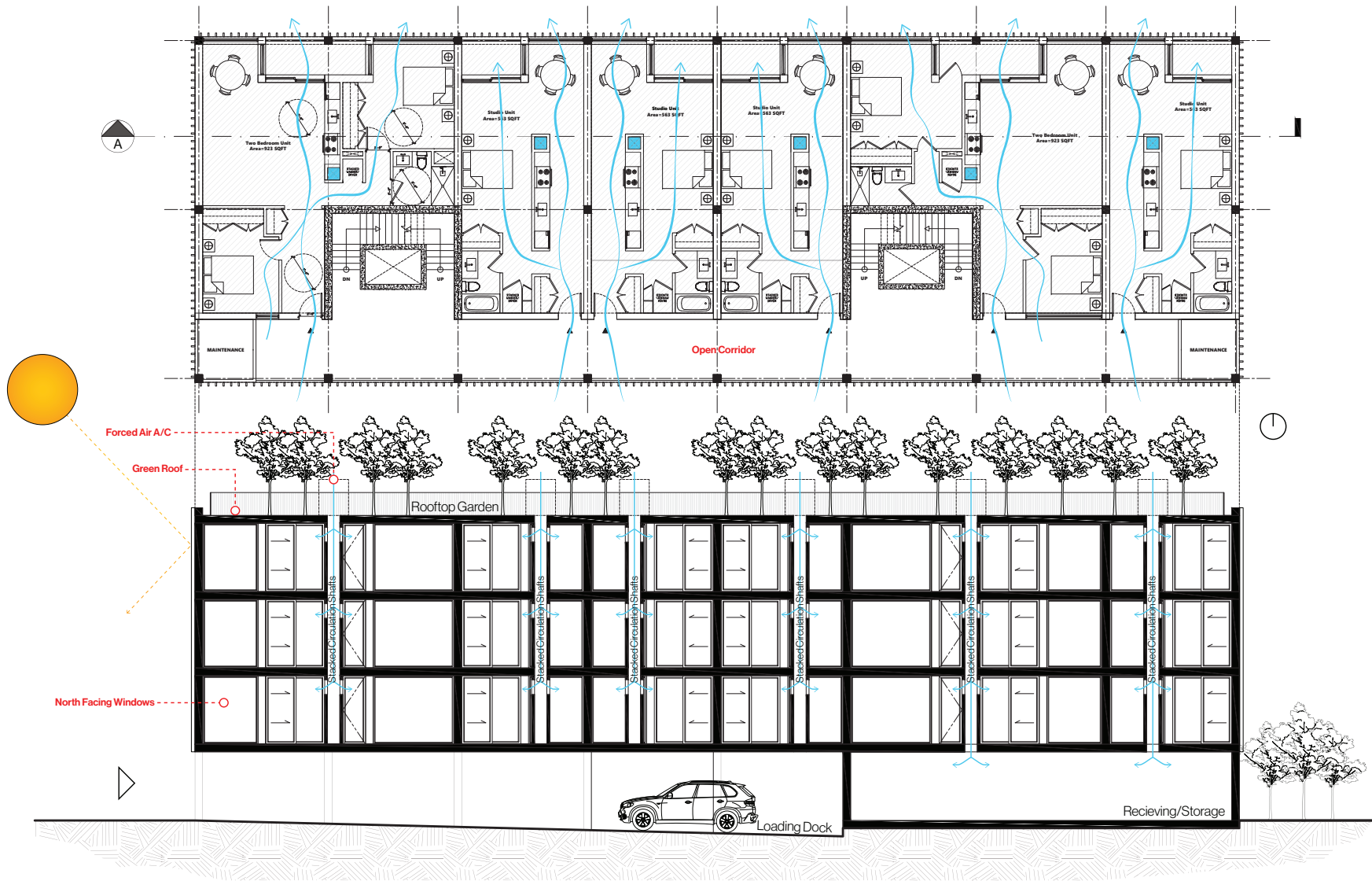
Fourth Floor



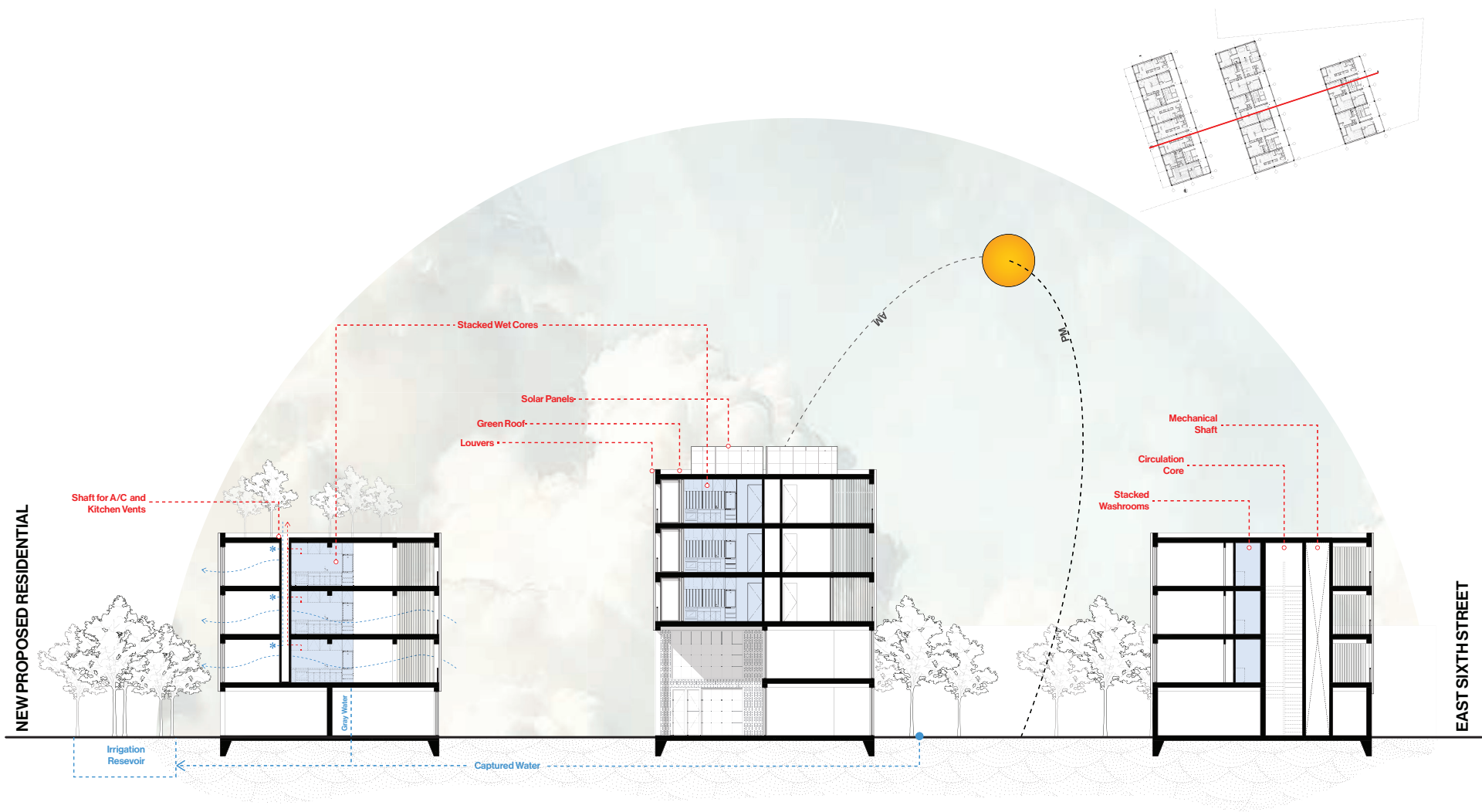
Fifth Floor



Sixth Floor



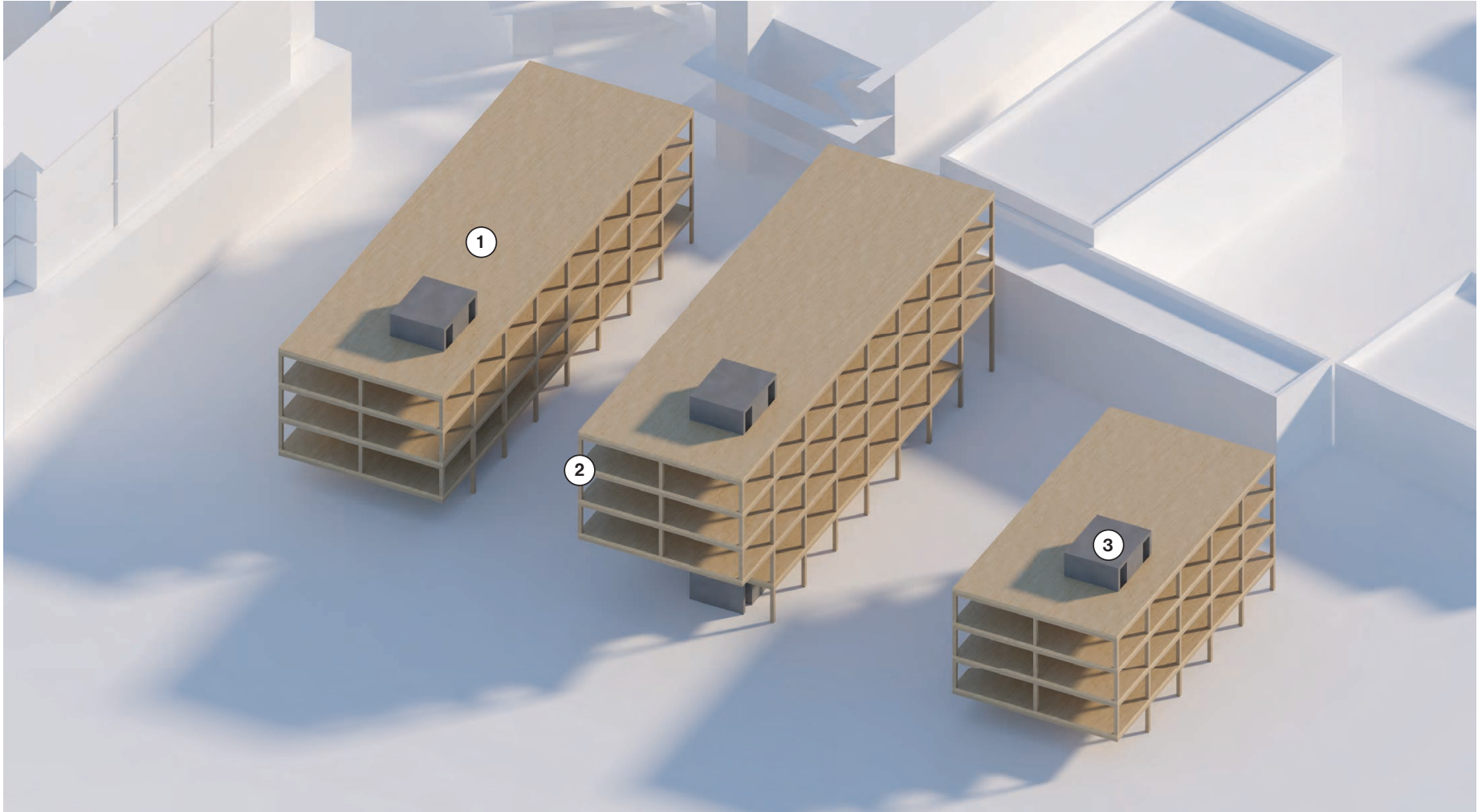
Active Systems (Stacked Ventilation Shafts for A/C Distribution)



Passive and Active Systems

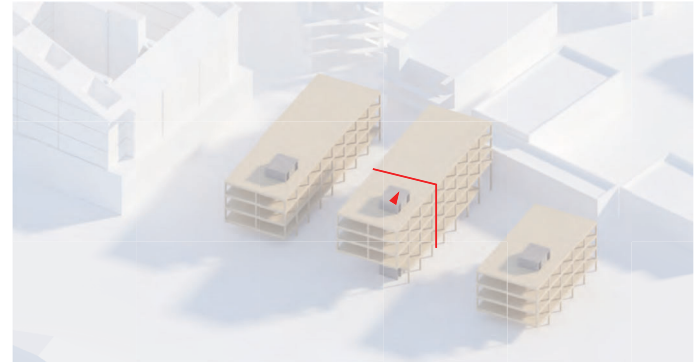
Structural Elements: Mass Timber Construction

- CLT Floor Panels
- Glulam Post and Beam System
- Concrete Cores (Stairs, Elevator and Mechanical Shafts)





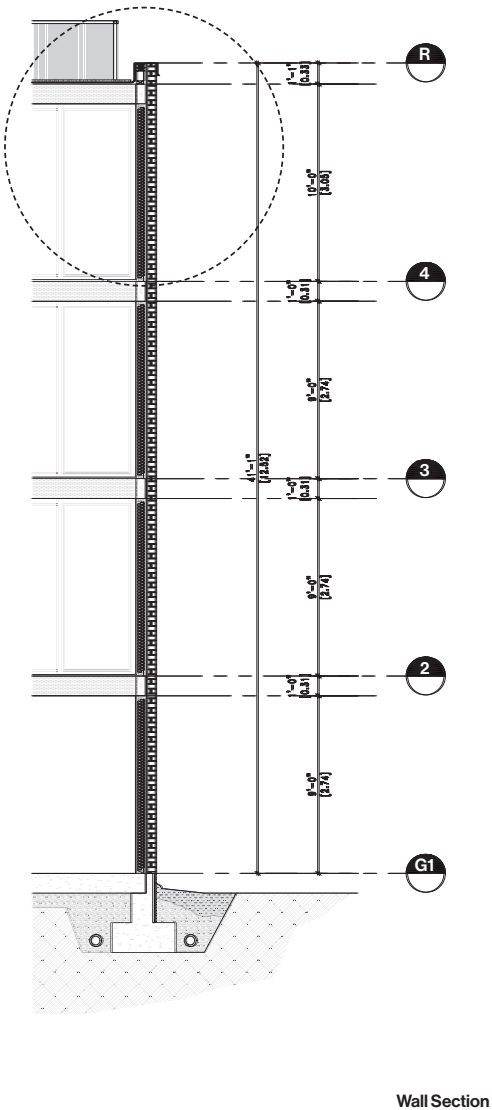
Structural Perspective Section



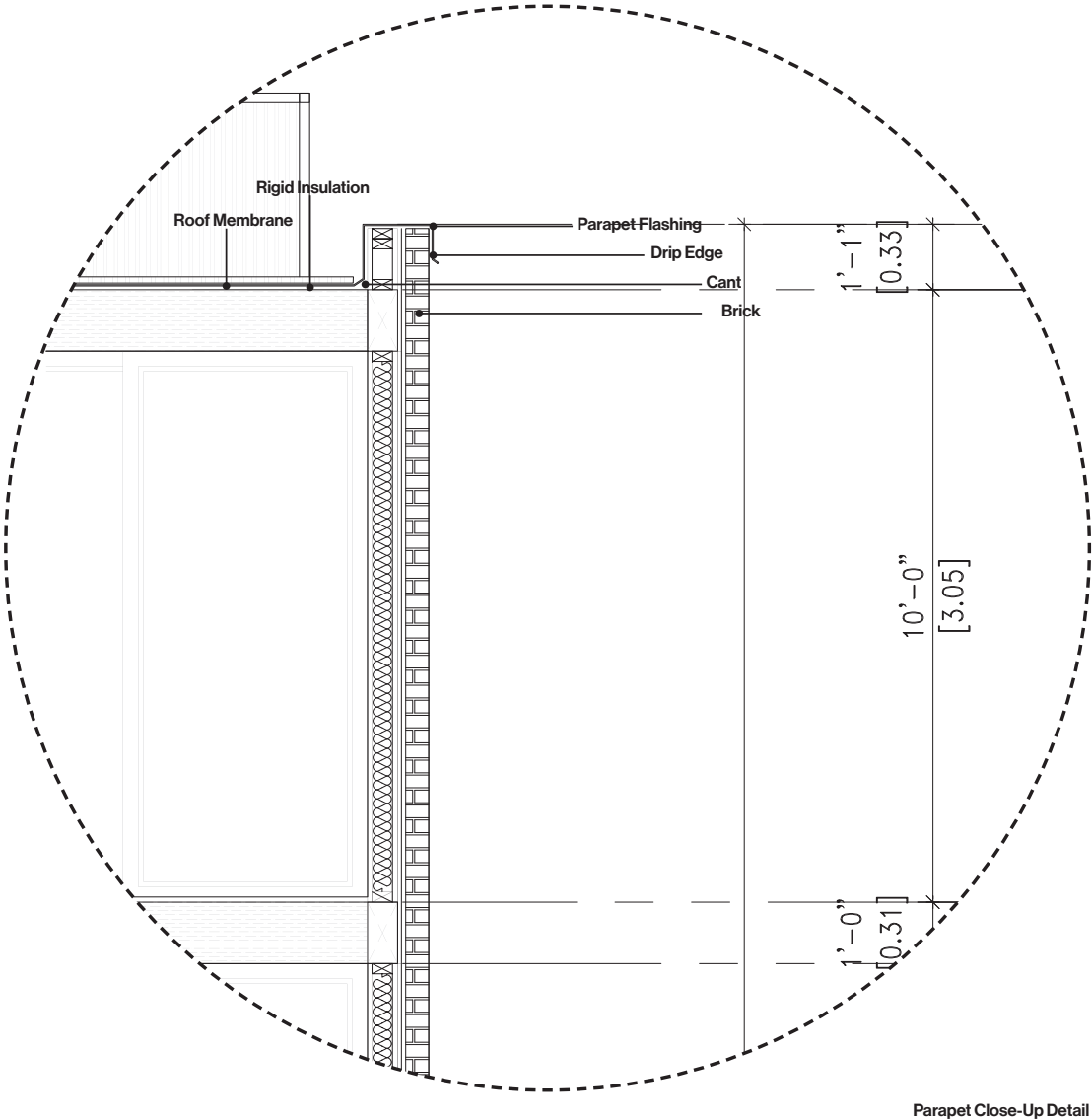
Structural Elements: Mass Timber Construction

1. CLT Floor Panels
2. Glulam Post and Beam System
3. Concrete Cores (Stairs, Elevator and Mechanical Shafts)



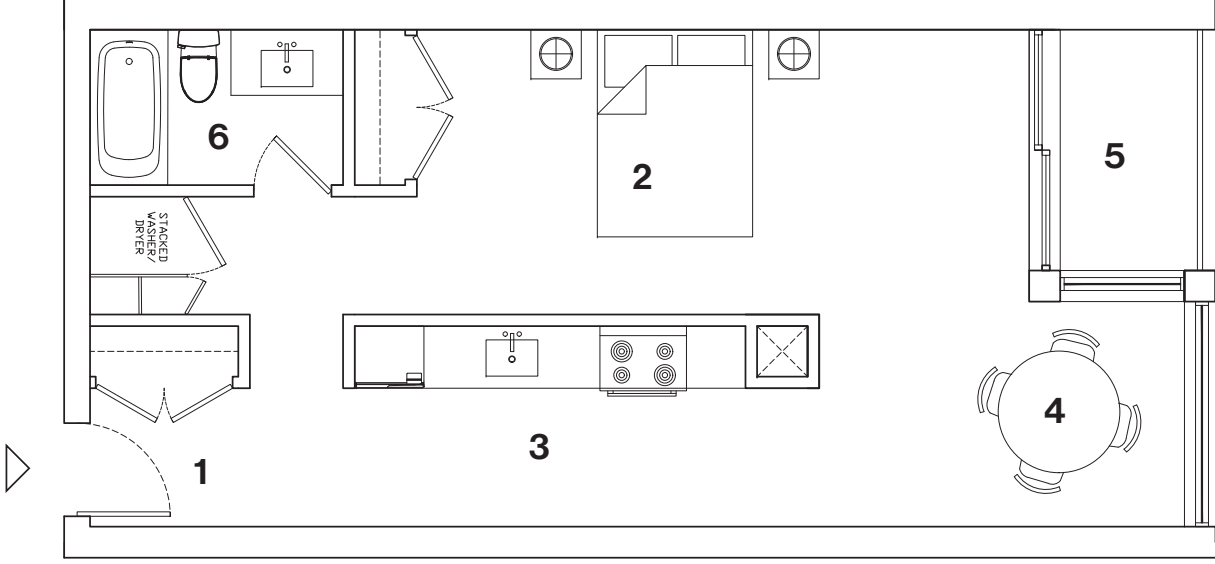


Wall Section



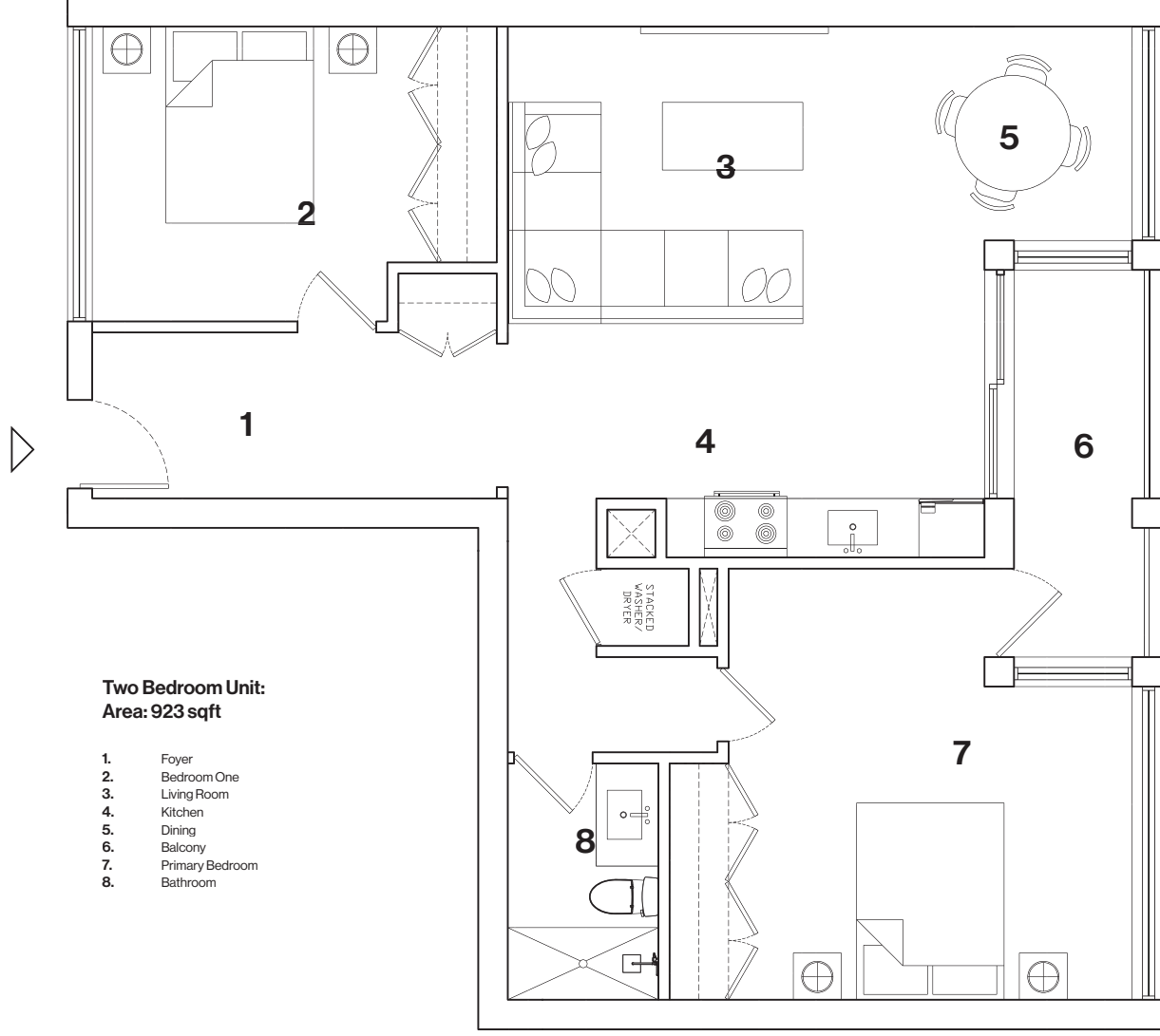
Parapet Close-Up Detail

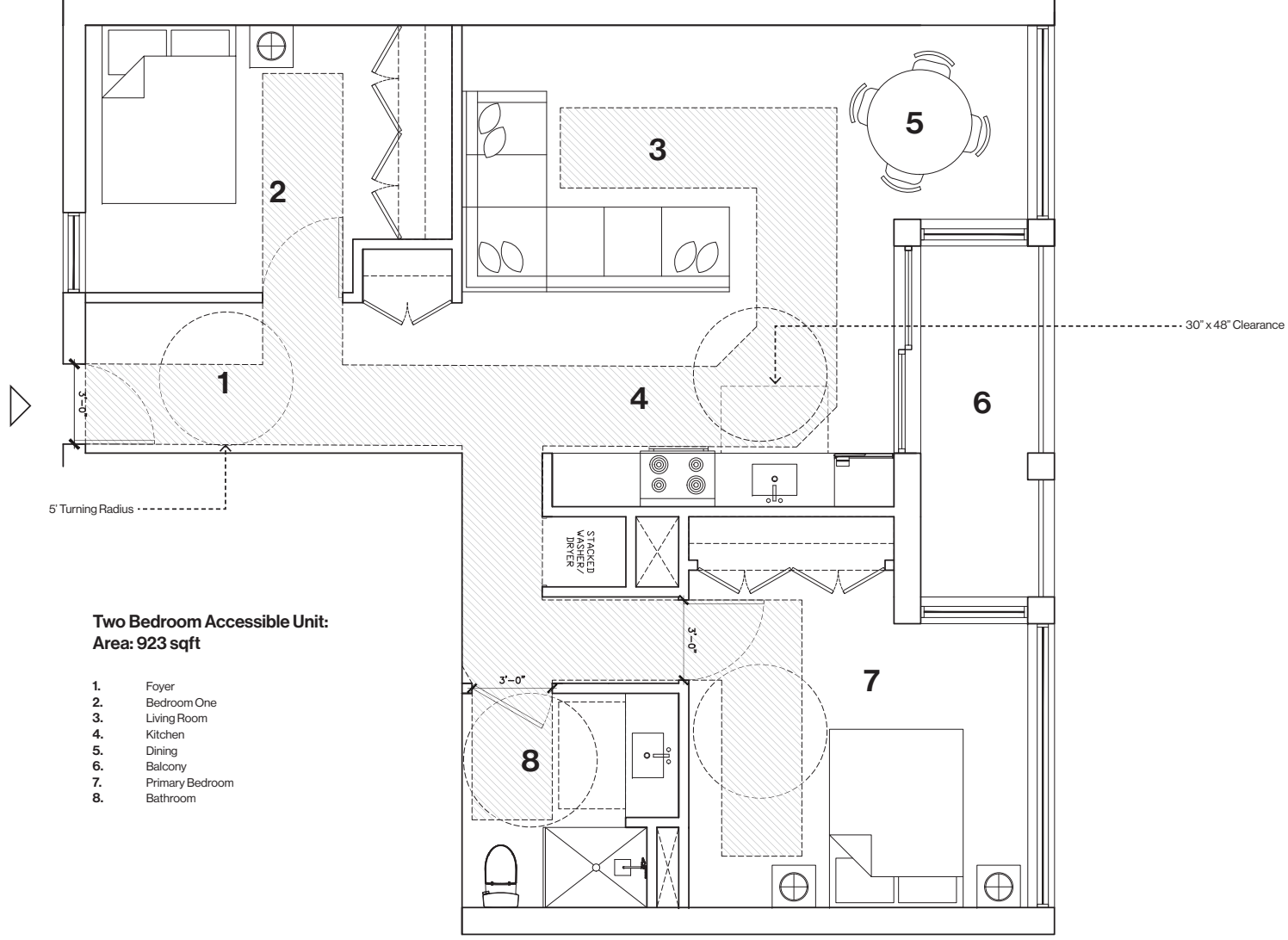
Units
Unit Types

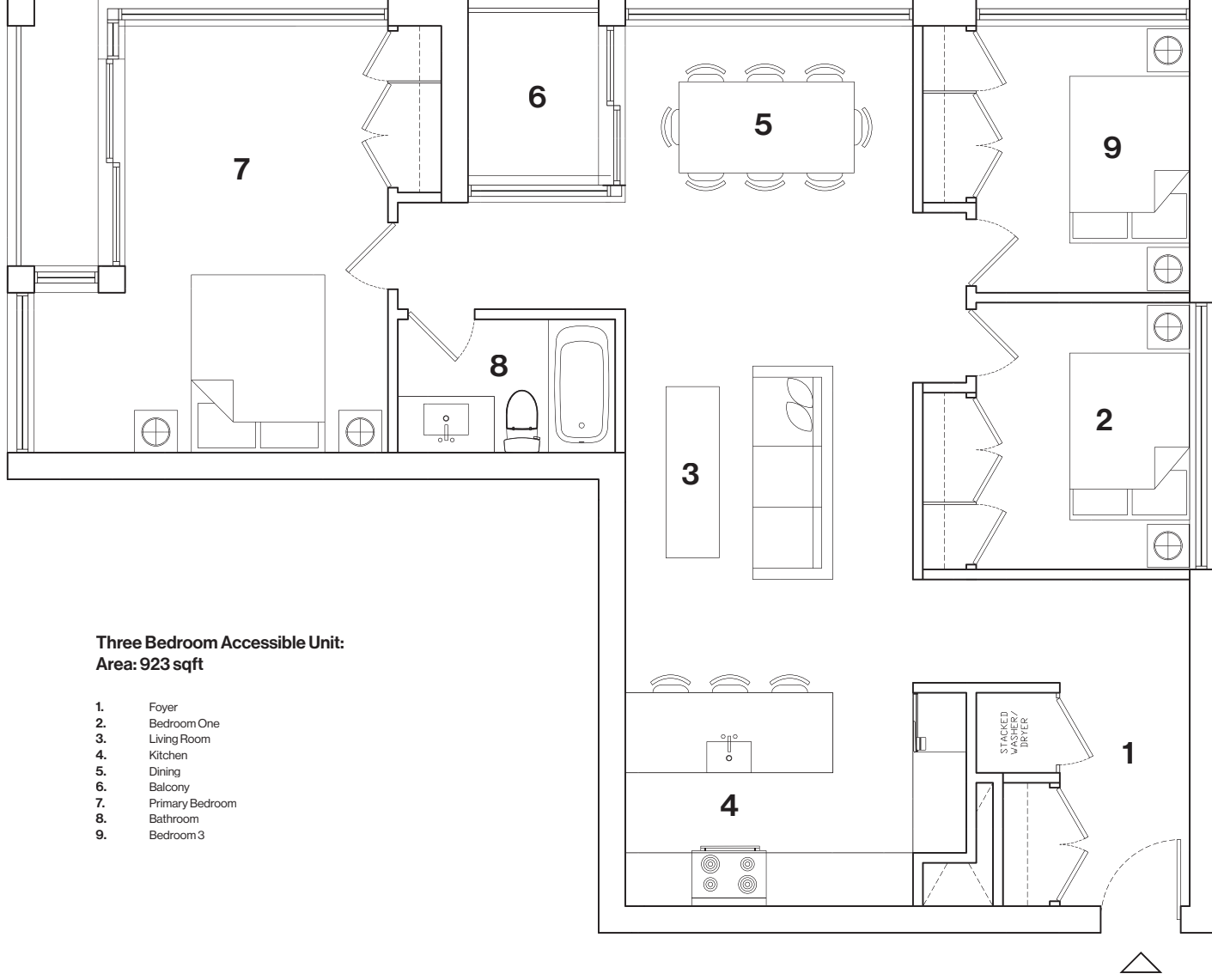


Studio Unit:
Area: 563 sqft

- 1. Foyer
- 2. Bedroom One
- 3. Kitchen
- 4. Dining
- 5. Balcony
- 6. Bathroom







Study Model
Photographs + Renders

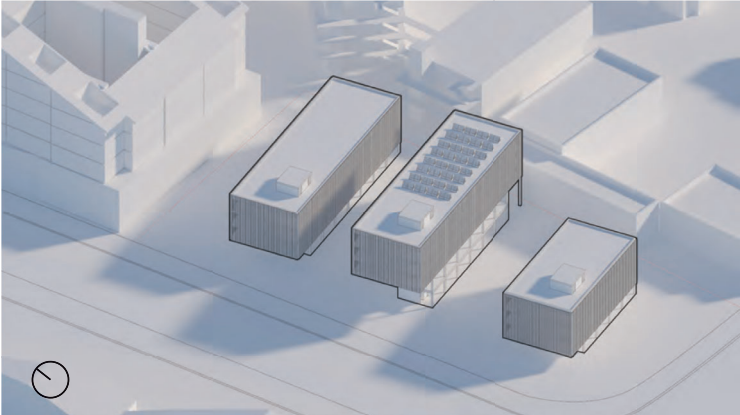


View from S. Anderson St. x East Sixth Street

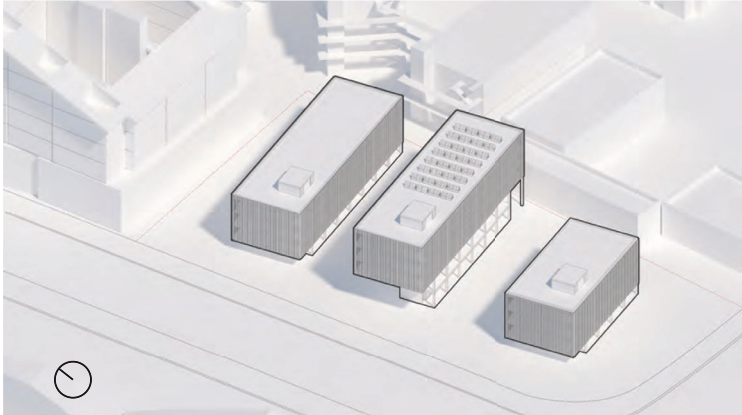


View from S. Anderson St.

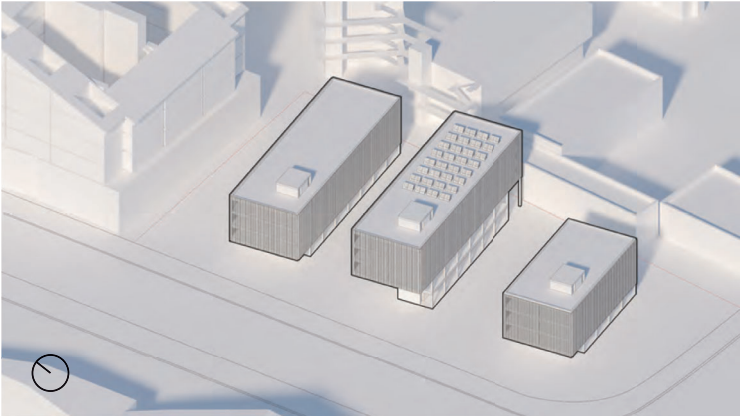
Lighting Study



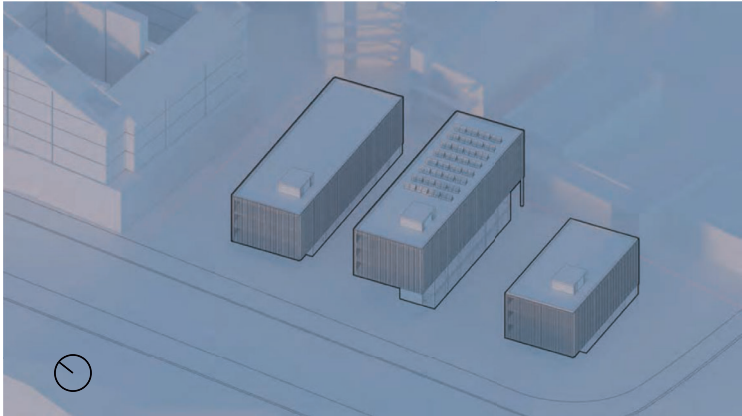
October 25, 2024 - 8:00 AM



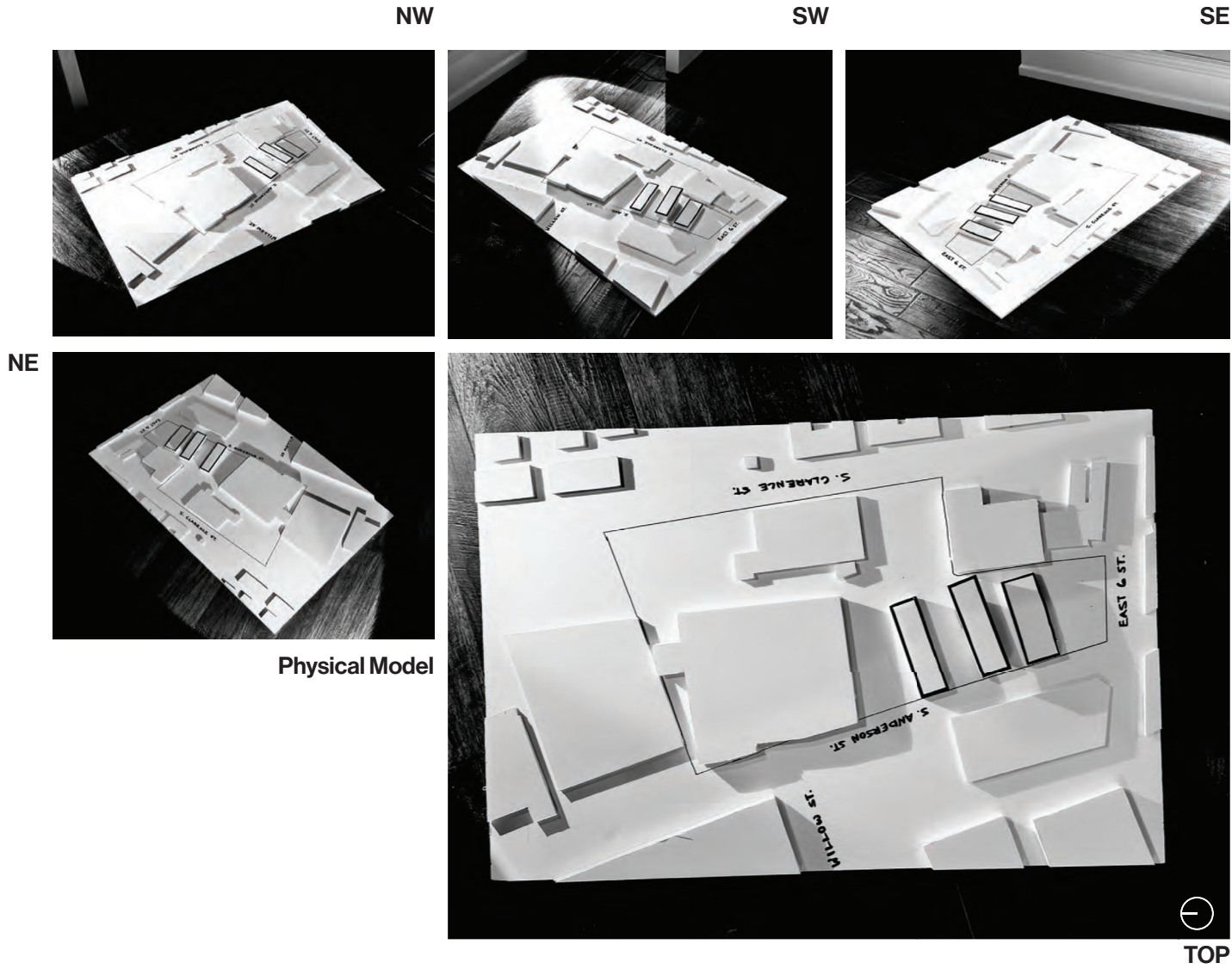
October 25, 2024 - 12:00 PM



October 25, 2024 - 3:00 PM



October 25, 2024 - 5:00 PM



ARC 501o

Module 4

Final Proposal

Assignment 4.1

Progress Draft

This assignment will ask students to compile, create, and submit a Progress Draft of your Final Presentation Package. This work will begin by meeting or communicating directly with your instructor to define expectations and deliverables from the below list specific to your individual project and working process.

Deliverables

- Cartoon outline of your Final Proposal Package with progress represented

Assignment 4.1

Final Draft

This assignment will ask students to compile, create, and submit a Final Draft of your Final Presentation Package. This work will begin by meeting or communicating directly with your instructor to define expectations and deliverables from the below list specific to your individual project and working process.

Deliverables

- Updated outline of your Final Proposal Package with progress represented

Assignment A 4.3

NAAB Collection

This assignment will ask students to collect and compile work conducted throughout the semester.

Deliverables

- Completed Student Work Template

Assignment 4.4

Final Presentation Package

This assignment will ask students to compile and create a final presentation package representing work conducted throughout the semester and how that amounted to the final design proposal. Students will be asked to present the Final Presentation Package and interact with a live jury of internal and external critics in discussion.

Deliverables

- A single, consolidated PDF document, Tabloid Format, Portrait or Landscape (use the same format for all pages). Maximum 20 MB file size. This document is expected to contain the following minimum materials:
- First page that includes graphic representation, including the surrounding neighborhood and context, that clearly conveys the main principles of your project.
- The type of drawing / graphic is up to you (based upon what you feel best conveys the ideas), but please coordinate with your instructor on this. Some examples would include your project massing in context, a composite drawing, a collage or similar representation, a diagrammatic contextual map, etc.
- Summary of Primary Areas of Interest / Ideas
- Summary of Main Points Taken From Research Phase
- Process Work That Demonstrates the Evolution of Your Project
- Isometric Massing Diagrams (with surrounding context)
- Site context
- Site and project circulation / access + egress
- Programmatic organization
- Environmental / ecological factors
- Sustainable / regenerative design strategies (passive + active)
- Key diagrams / information responding to Design Principles and matters of concern
- Additional diagramming specific to illustrating student proposal
- Please note: Massing diagrams that show your project in context should include the basing outline of the neighboring proposals in your site group.

- Site Plan (1/32"=1'-0")
- Please include at least an outline of the neighboring proposals in your site group
- Site + Building Section (1/32"=1'-0")
- Floor Plan(s) (1/16"=1'-0)
- Enlarged Floor Plans (1/4"=1'-0)
- One (1) including residential area
- One (1) including public or shared area
- Please note: these enlarged drawings will show only a limited portion of your project
- Enlarged Typical Unit Plan(s) (1/4"=1'-0)
- Two (2) Building Sections (1/16"=1'-0)
- One cross and one longitudinal
- Enlarged Building Section (1/4"=1'-0)
- Please note: these enlarged drawings will show only a limited portion of your project
- Exterior Elevation(s) (1/16"=1'-0)
- Approximately 2-4 primary exterior elevations from your project. Please consult with your instructor in selecting them.
- Minimum two (2) Exterior Perspectives
- Minimum one (1) Section Perspective focusing on interior residential units and hybrid program
- 5 images of study model (NE, SE, SW, NW and top view)
- Download link to your Rhino (or similar) digital model. Please do not direct upload.

PE4 - Final Proposal
PE4



INITIAL SUMMARY

TOPICS

Site

Boyle Heights

About Boyle Heights

Affordable Housing and Gentrification Concerns

Contextual Map

Site Axo (Contextual)

4

5

6

7

Project Design

Design Proposal

Previous Massing Iterations

Physical Model

Final Massing Iteration

Isometric Site Massing Diagram

Site Plan

Occupancy Types

Exterior Render

Structural Design

Floorplans

Unit Layout Research

Preliminary Units

Units

Enlarged Floorplans

Breezeway Render

Detail Sections

Elevations + Sections

Enlarged Building Section

Perspective Section

Conclusion

9

10

11

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16-17

18-22

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25-27

28-29

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32-33

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Site Context
About Boyle Heights

Boyle Heights



Mariachi Band member walking in Mariachi Plaza, Boyle Heights

Respect for Cultural Landmarks

- Ensuring that new developments respect culturally significant sites important to local community

Community Involvement

- Engaging with cultural organizations and local residents
- Discussing redevelopment plans to see if they are in line with the communities vision

Case Study

Mariachi Plaza

History

- Located in Boyle Heights
- Mariachi Bands have gathered here since the 1930's
- A Hub for music, social gatherings and cultural events

Considerations for Development

- Redevelopment should be sensitive to its cultural significance and use
- A public space for gathering
- Maintain its architectural style and public art



Ice cream shop in Marachi Plaza, Boyle Heights



Traditional latino murals, Mariachi Plaza

References:

November 18, 2020 | Betty Marin | Comments. (n.d.). The sounds of California in Boyle Heights, Los Angeles. Smithsonian Center for Folklife and Cultural Heritage. <https://folklife.si.edu/magazine/sounds-of-california-boyle-heights-los-angeles>
Bermudez, E. (2014). Mariachi plaza development plan worries l.a. musicians. Los Angeles Time. Retrieved from <https://www.latimes.com/local/california/la-me-mariachi-plaza-20141201-story.html>.

Affordable Housing and Gentrification Concerns



The Lorena Project, an affordable housing development currently underway

References:

Development without displacement. East LA Community Corporation. (n.d.). <https://www.elacc.org/>
RSO Overview. LAHD. (n.d.). <https://housing2.lacity.org/residents/rso-overview>

Affordable Housing Integration

- New developments should consider including affordable housing options to prevent displacement of the long-term residents of the area

Resources

Affordable Housing Development Projects

- Addresses housing needs while ensuring such projects as "The Lorena Project", are sensitive to local cultural and historical concerns
- Ensuring community input and transparency in the planning process

Community Land Trusts (CLTs)

- Created by the East Los Angeles Community Corporation (ELACC)
- A Non-Profit organization
- Acquires and Manages land to provide affordable housing and prevent displacement by retaining ownership of the land
- Provides affordability for future generations
- Secures long term affordability against gentrification

Equitable Development

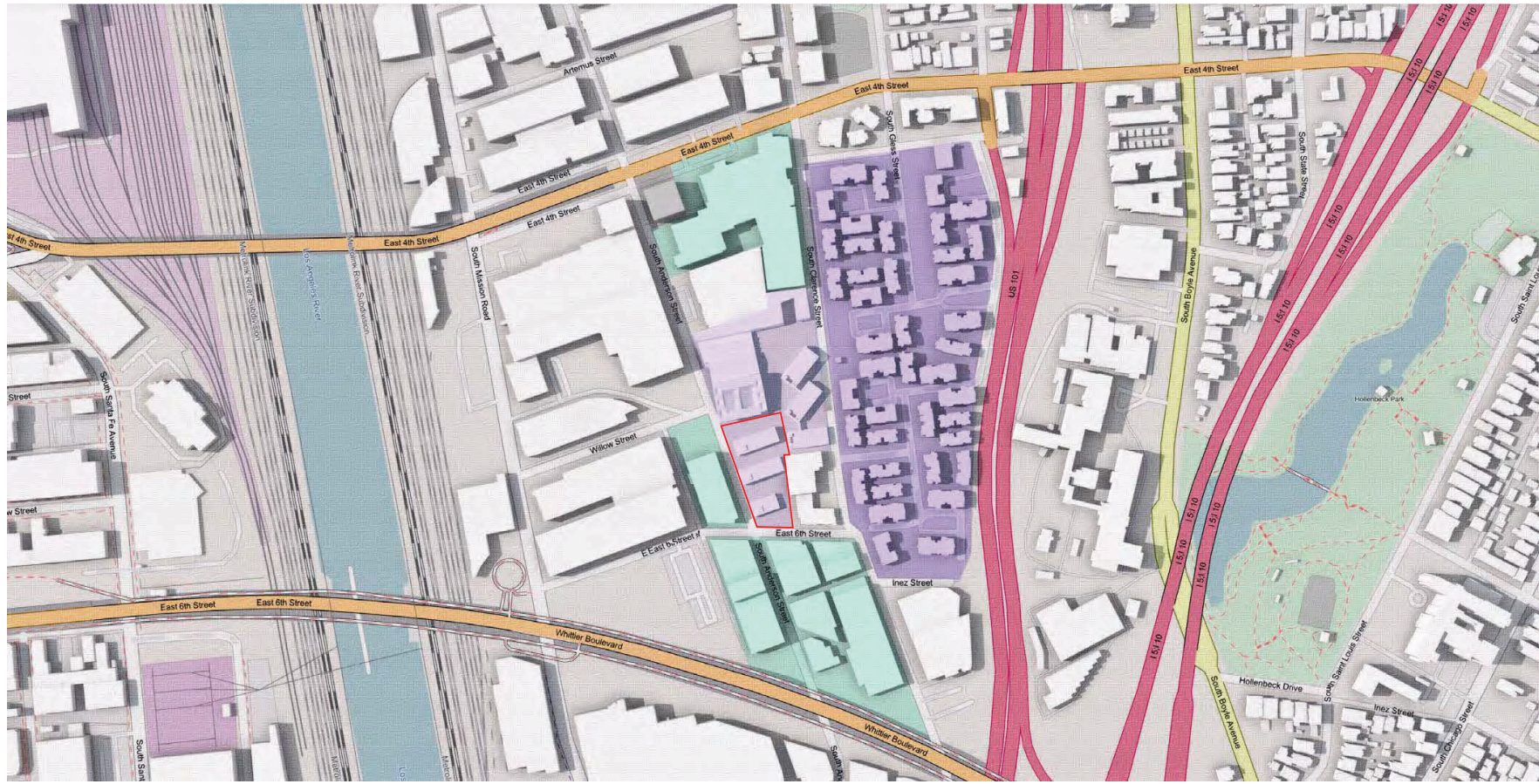
- a community-centered approach to planning and growth that ensures all residents, especially marginalized groups, benefit fairly from economic, social, and environmental improvements.

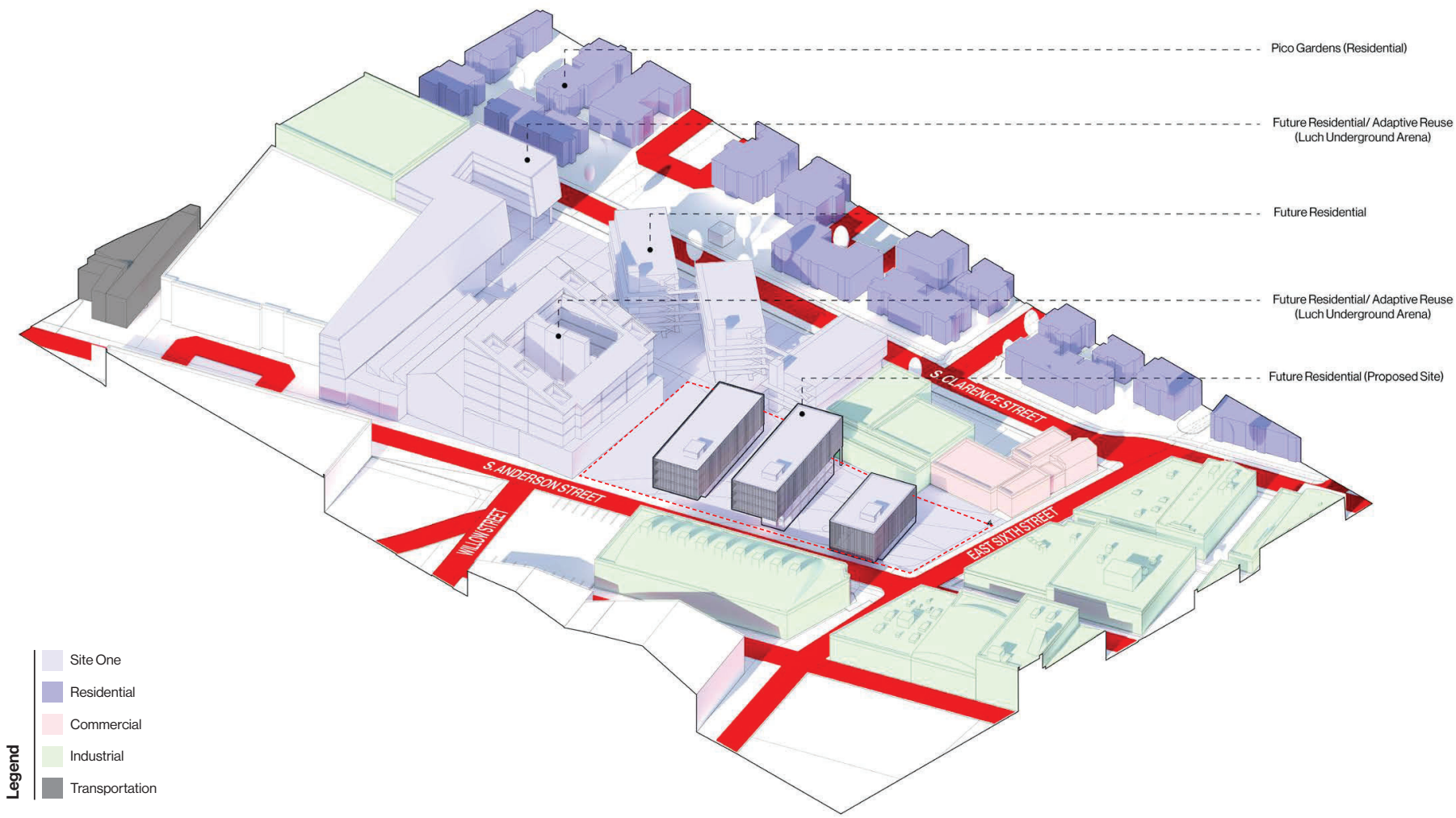
Tenant Protections and Rent Control

- Community groups in Boyle Heights advocate for stronger tenant protections to address gentrification, including:
 - Expanding rent control.
 - Implementing just-cause eviction laws.
 - Los Angeles has enacted policies to prevent displacement, such as:
 - Rent Stabilization Ordinance (RSO): Limits rent increases for certain older housing stock.
- Strengthen rent control.
- Enforce just-cause eviction ordinances.
- Provide rental assistance programs.
- Ensure new developments comply with these regulations to prevent displacement.

Legend

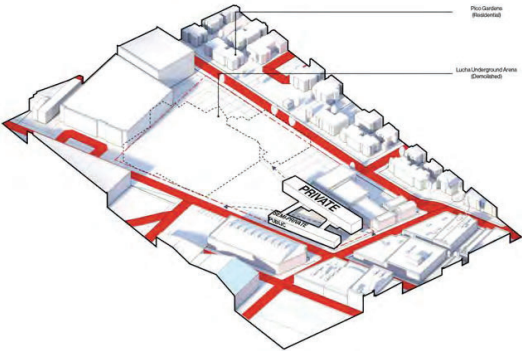
- Site One
- Residential
- Commercial
- Industrial
- Transportation



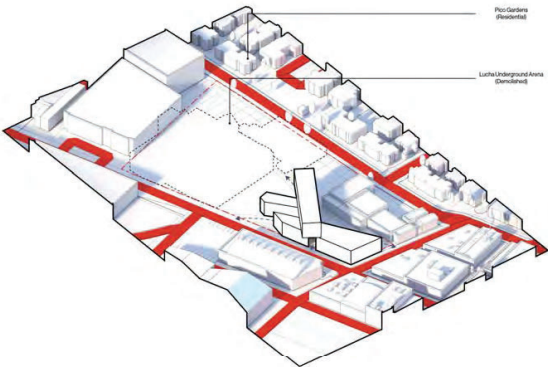


Project Design
Design Proposal

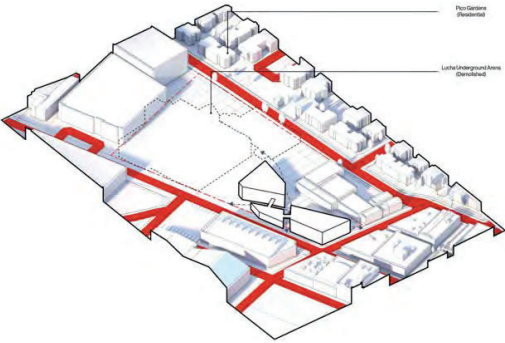
Previous Massing Iterations



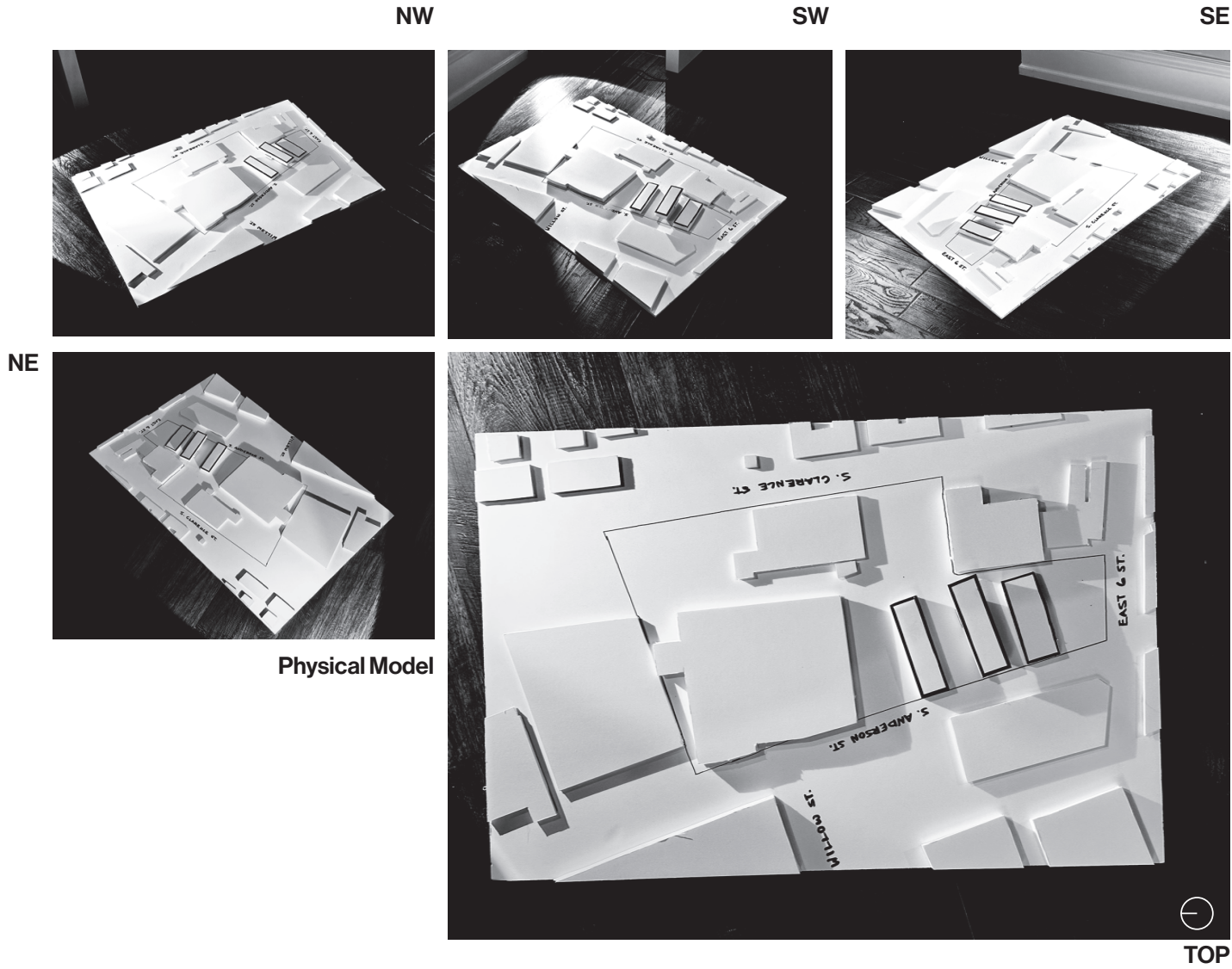
Massing One

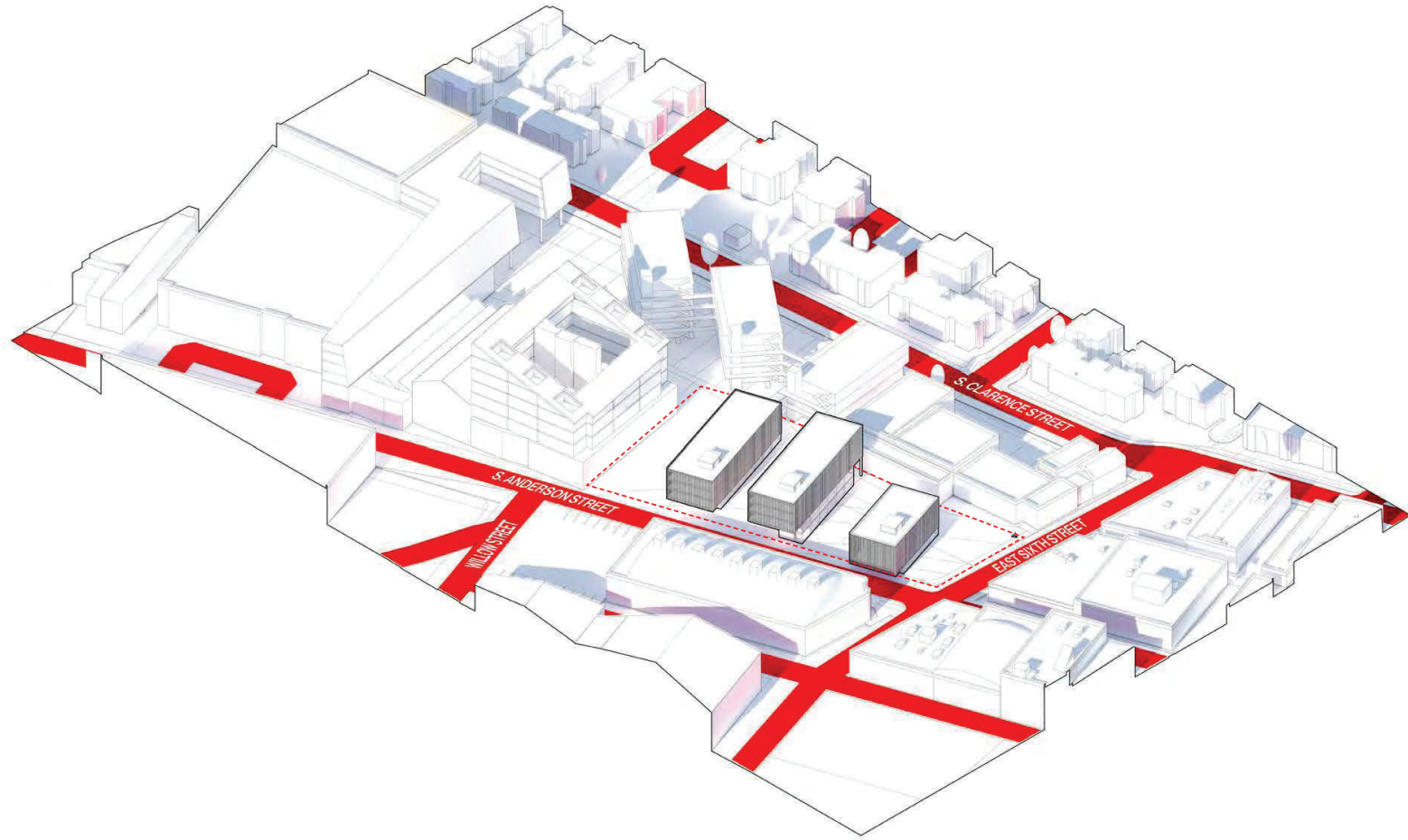


Massing Two



Massing Three





Final Massing Iteration

SW Axo View



| Building A | Building B | Building C | Building A,B,C |
|-------------------------|-------------------------|-------------------------|-------------------------|
| Total Area: 22,551 sqft | Total Area: 24,985 sqft | Total Area: 14,049 sqft | Total Area: 61,585 sqft |
| Max Height: 78' - 0" | Max Height: 60' - 8" | Max Height: 78' - 0" | |
| Stories: 4 | Stories: 5 | Stories: 4 | |



Building Matrix
Occupancy Types (Section 301)

Building A

Ground Floor

Lobby/Reception (Assembly Group A-3)
Storage (311.2 Moderate-Hazard Storage, Group S-1)
Mechanical (Section 312 Utility and Miscellaneous Group U)

Second Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Third Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fourth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Building A Units

Studio: 12 Units
Two Bedroom: 6 Units
Three Bedroom: 0 Units

Total Units: 18 Units

Building B

Ground Floor

Lobby/Reception (Assembly Group A-3)
Market (309.1 Mercantile Group M)
Mechanical (Section 312 Utility and Miscellaneous Group U)

Second Floor

Library (303.1.2 Small Assembly Spaces)
Cafe (303.1.2 Small Assembly Spaces)
Offices (304.1 Business Group B)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Third Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fourth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fifth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Building B Units

Studio: 3 Units
Two Bedroom: 9 Units
Three Bedroom: 3 Units

Total Units: 15 Units

Building C

Ground Floor

Market (309.1 Mercantile Group M)
Mechanical (Section 312 Utility and Miscellaneous Group U)

Second Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Third Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Fourth Floor

Residential (310.3 Residential Group R-2)
Storage (311.2 Moderate-Hazard Storage, Group S-1)

Building C Units

Studio: 3 Units
Two Bedroom: 6 Units
Three Bedroom: 0 Units

Total Units: 8 Units

Complex Total Units

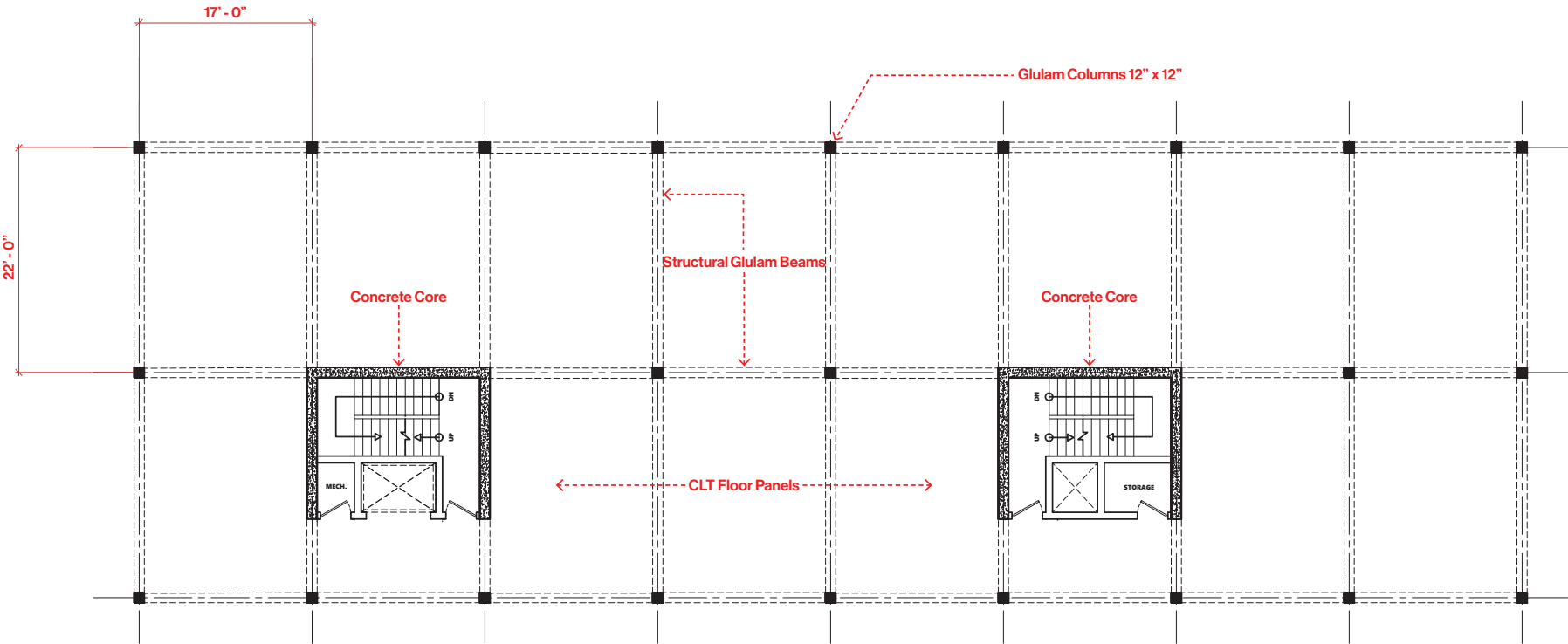
Studio: 18 Units
Two Bedroom: 21 Units
Three Bedroom: 3 Units

Total Units: 41 Units



Structural Elements: Mass Timber Construction

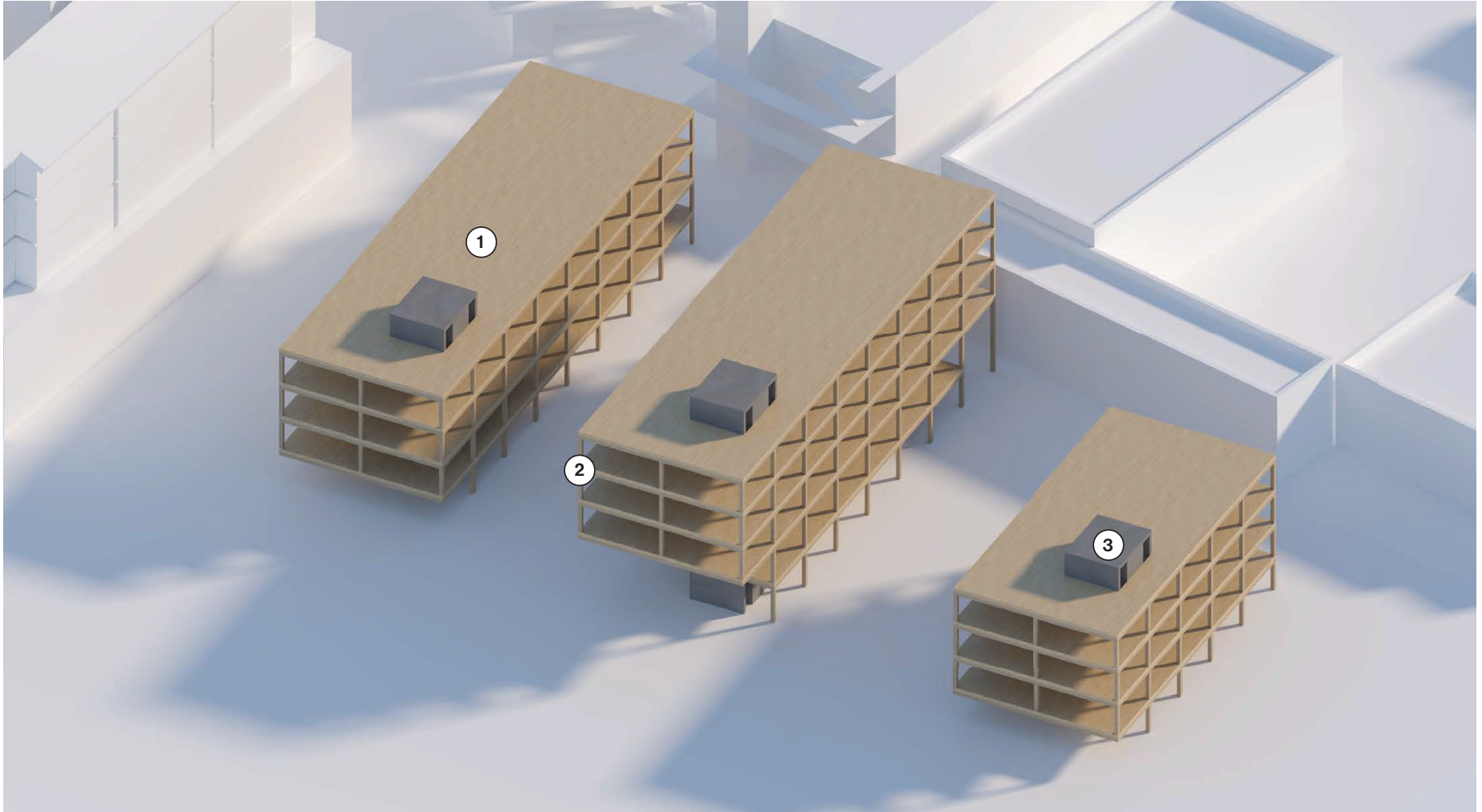
Standard Structural Sample

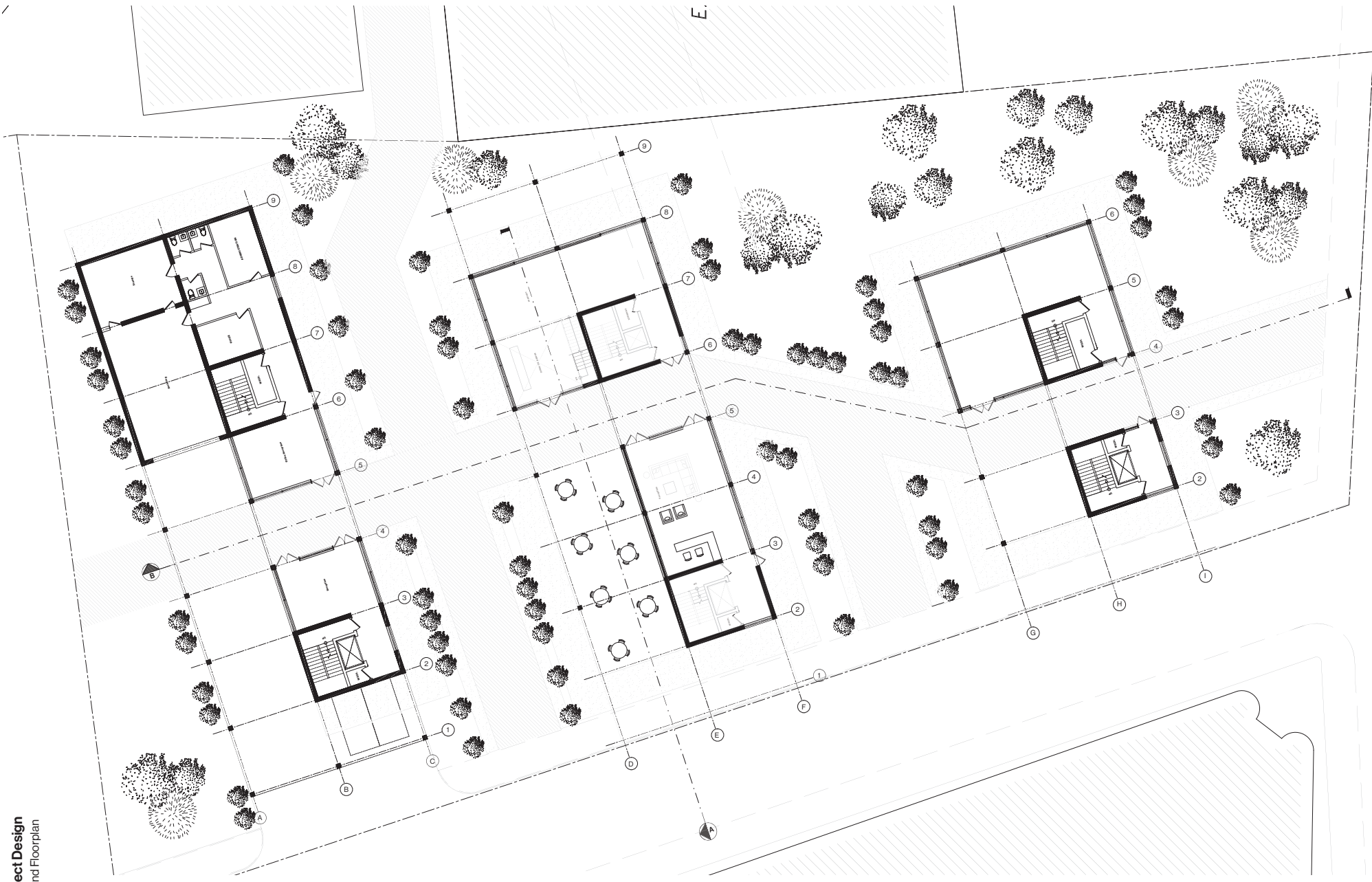


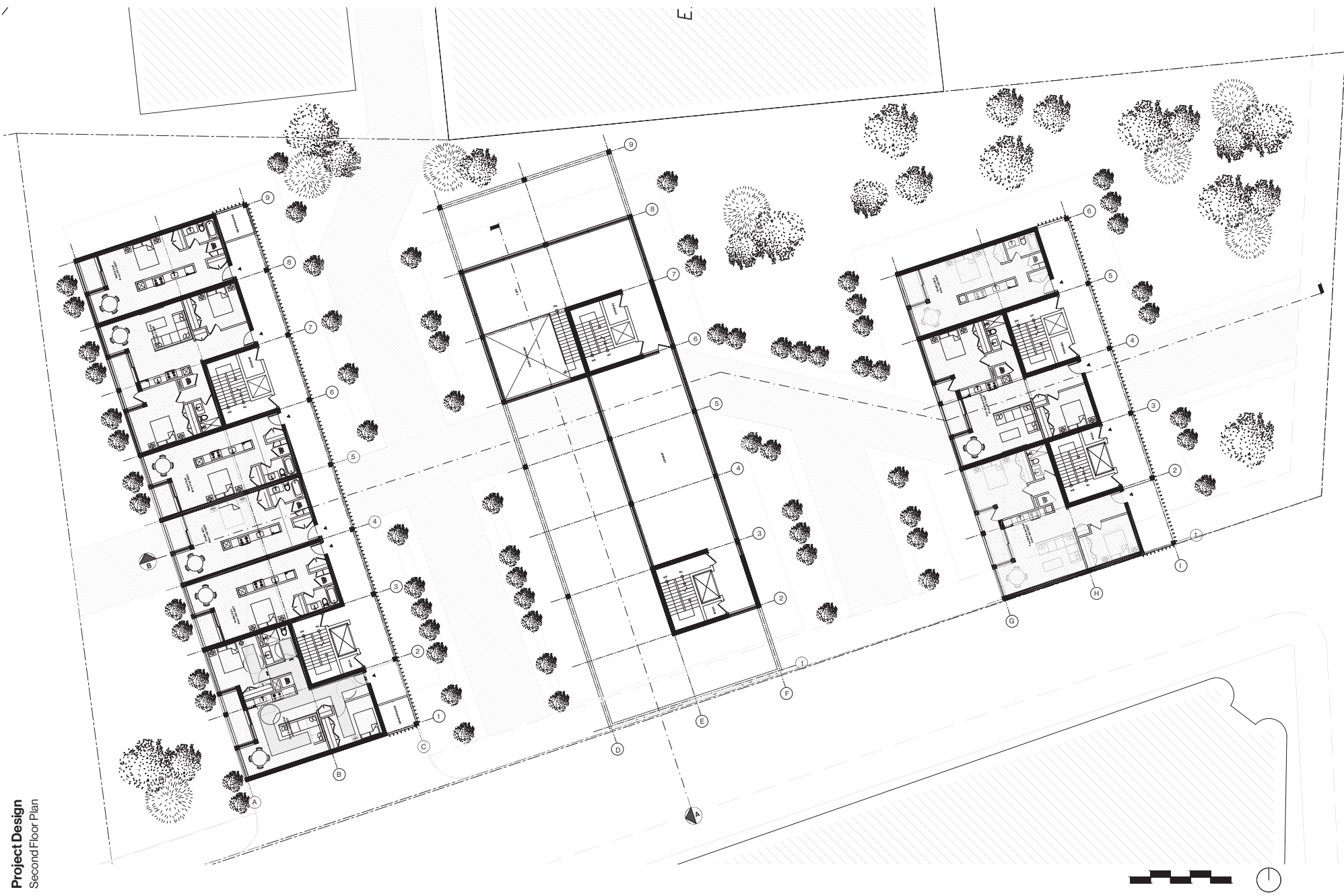
Floor Assembly Sample

Structural Elements: Mass Timber Construction

- CLT Floor Panels
- Glulam Post and Beam System
- Concrete Cores (Stairs, Elevator and Mechanical Shafts)



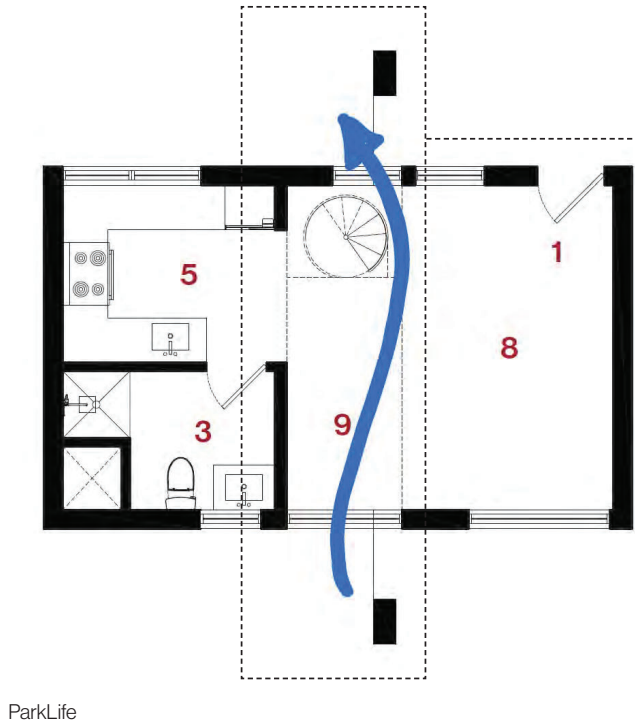












Unit Layout Research

Sustainability Aspect
ParkLife

Cross Ventilation for Comfort and Sustainability

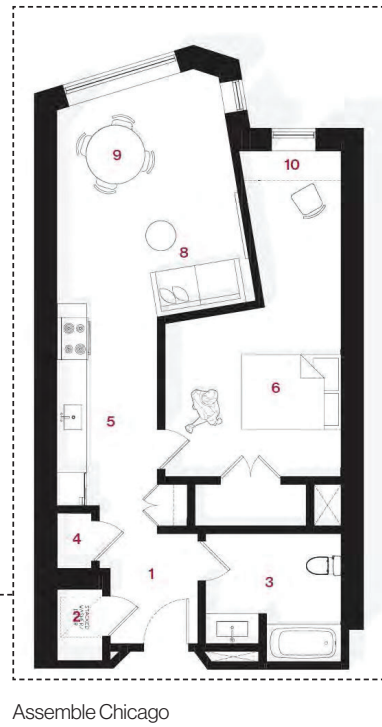
- Inspired by ParkLife by Austin Maynard Architects, incorporating cross ventilation can naturally cool the units.
- Boyle Heights has hot weather most of the year, making this a sustainable solution for maintaining comfortable temperatures in the units.

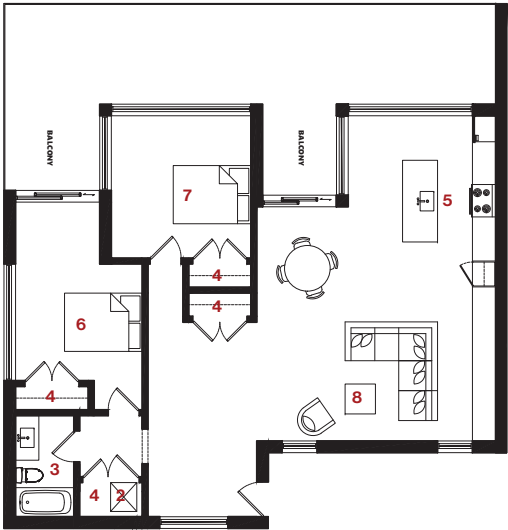


Unit Form
Assemble Chicago

Staggered Unit Layout

- Inspired by Assemble Chicago, staggered layouts help maximize usable square footage.
- Optimizes space within smaller units, enhancing livability for residents.





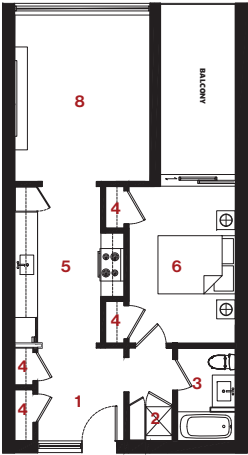
Two Bedroom Unit

| | |
|------------|---|
| Bedrooms - | 2 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

Area: 1060 SQFT



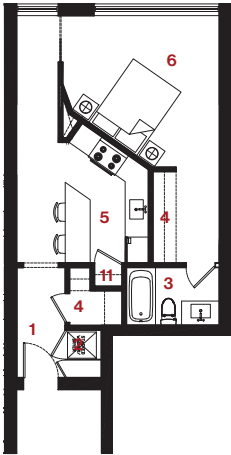
One Bedroom Unit

| | |
|------------|---|
| Bedrooms - | 1 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible, Dining Room, Living Room, Study

Area: 689 SQFT



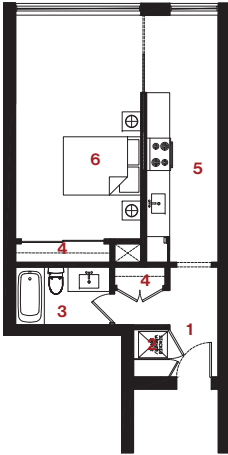
Studio Unit A

| | |
|------------|---|
| Bedrooms - | 0 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible

Area: 500 SQFT



Studio Unit B

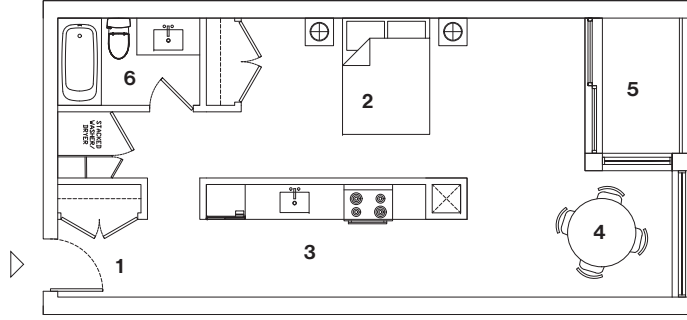
| | |
|------------|---|
| Bedrooms - | 0 |
| Baths - | 1 |

Extras:

Laundry (Washer/Dryer), Accessible

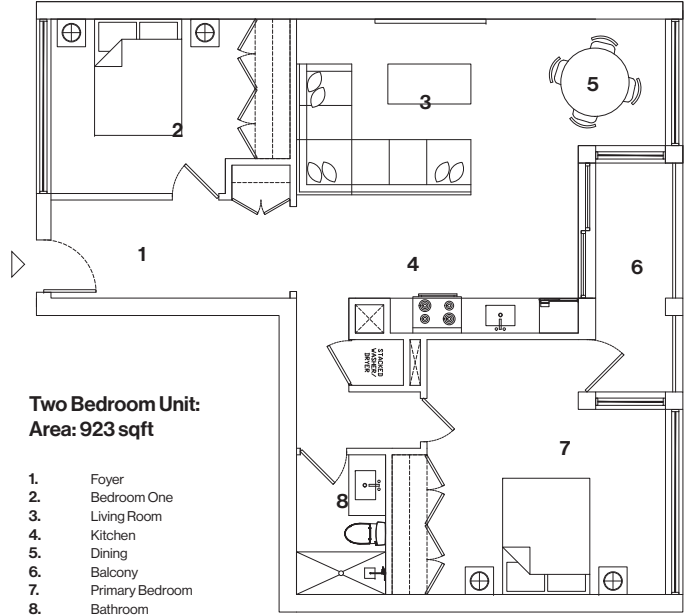
Area: 500 SQFT

- Legend
- 1 Foyer
 - 2 Laundry
 - 3 Bathroom
 - 4 Closet
 - 5 Kitchen
 - 6 Bed
 - 7 Bed 2
 - 8 Living Room
 - 9 Dining Room
 - 10 Study
 - 11 Pantry



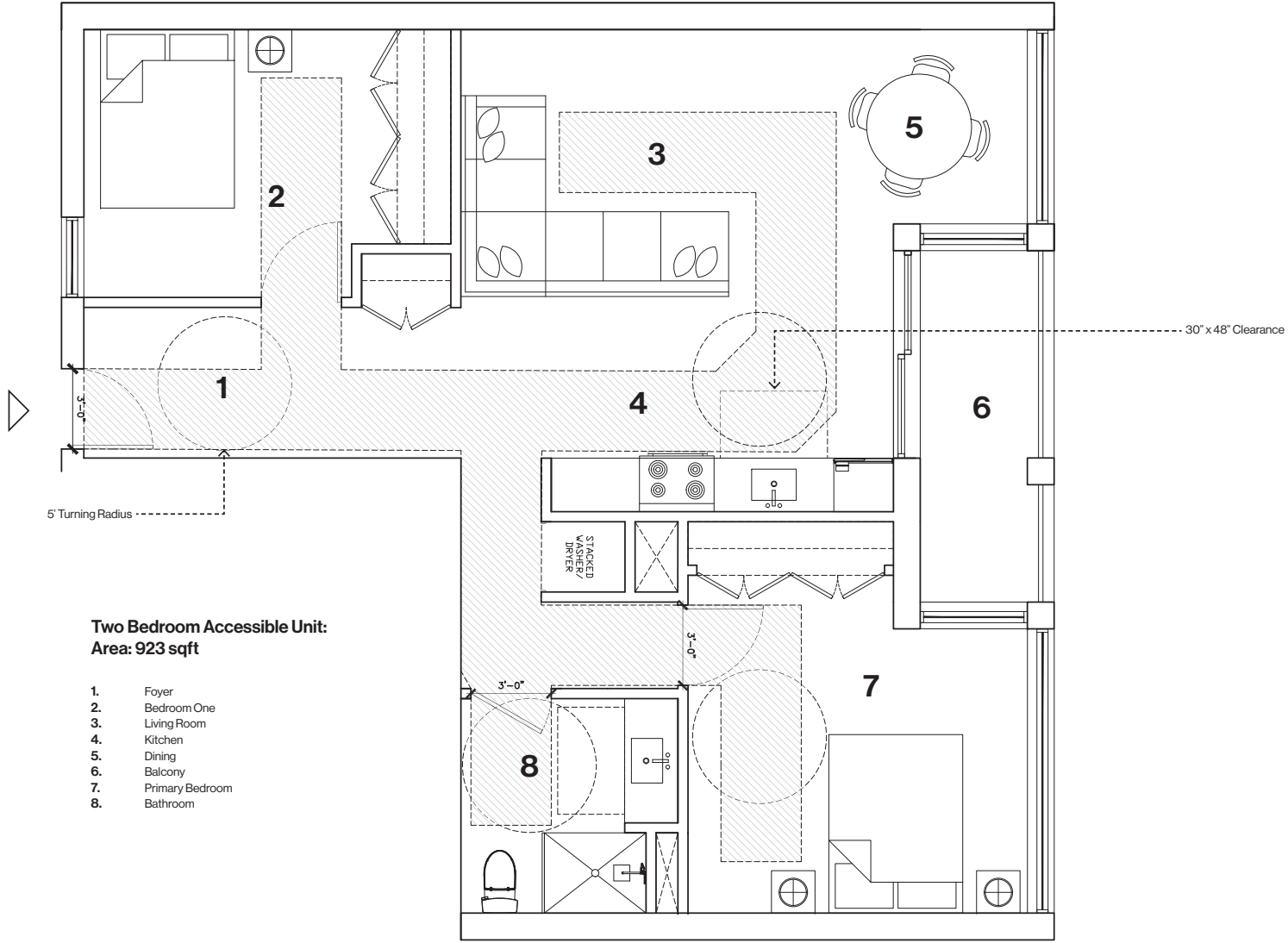
Studio Unit:
Area: 563 sqft

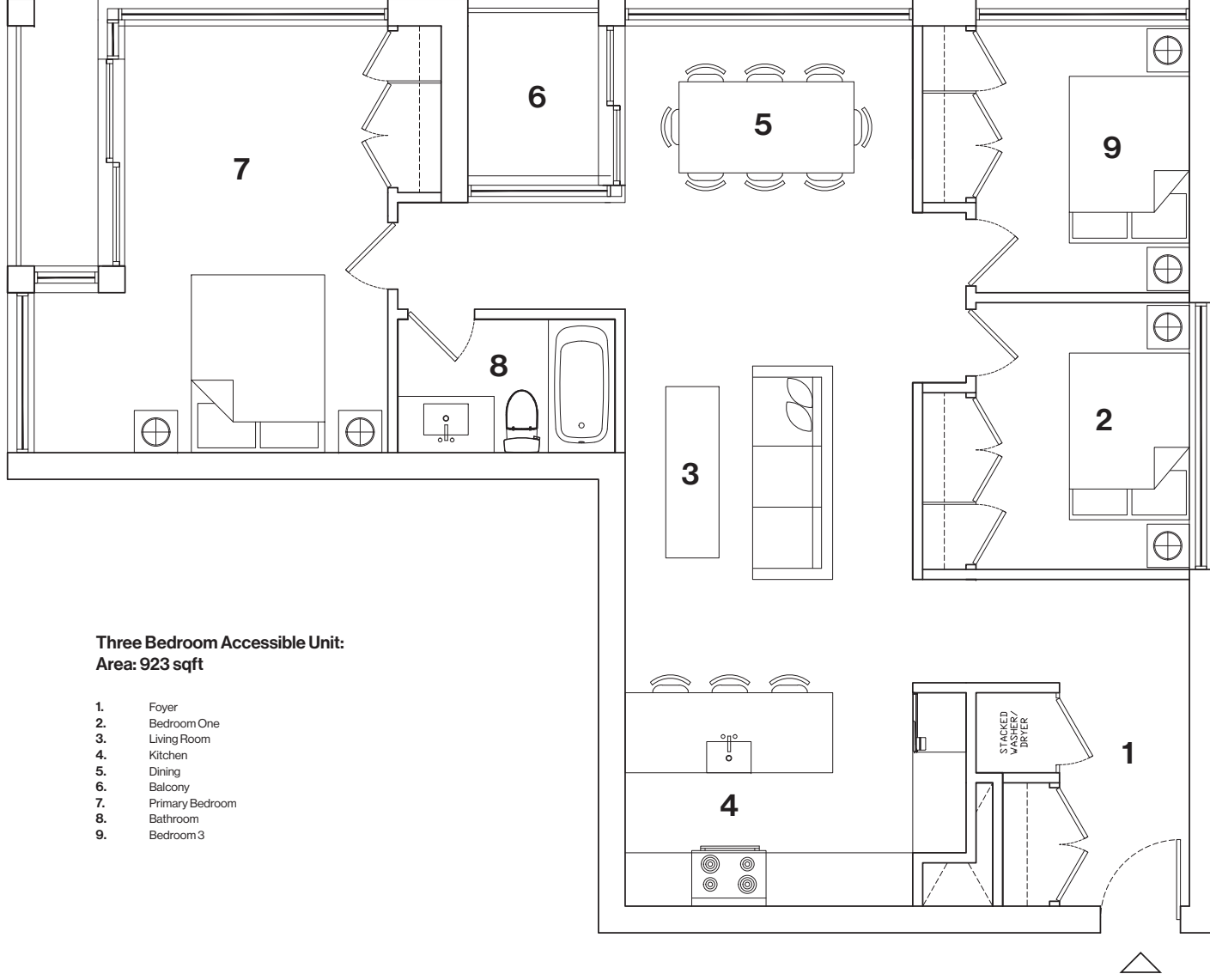
- 1. Foyer
- 2. Bedroom One
- 3. Kitchen
- 4. Dining
- 5. Balcony
- 6. Bathroom

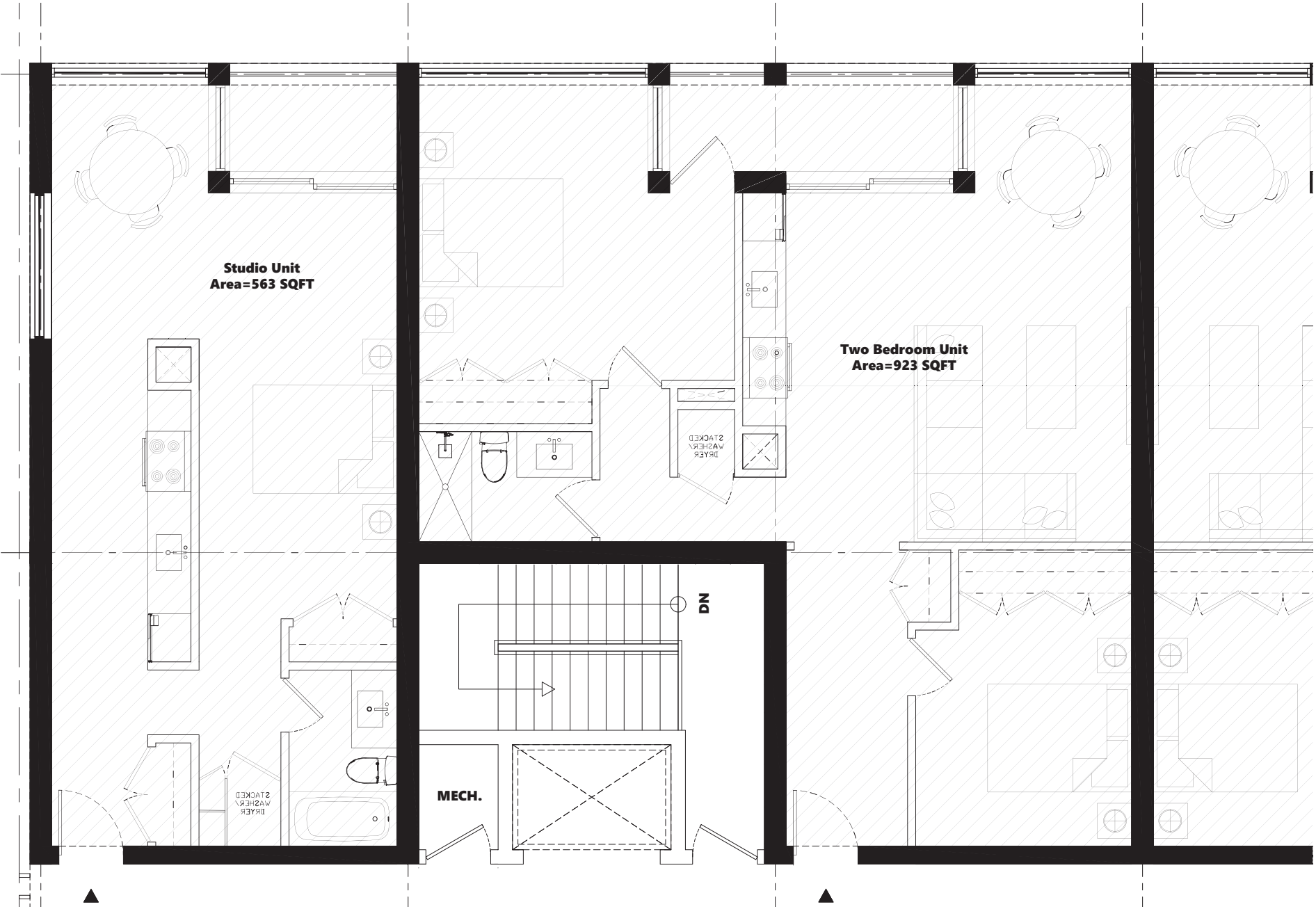


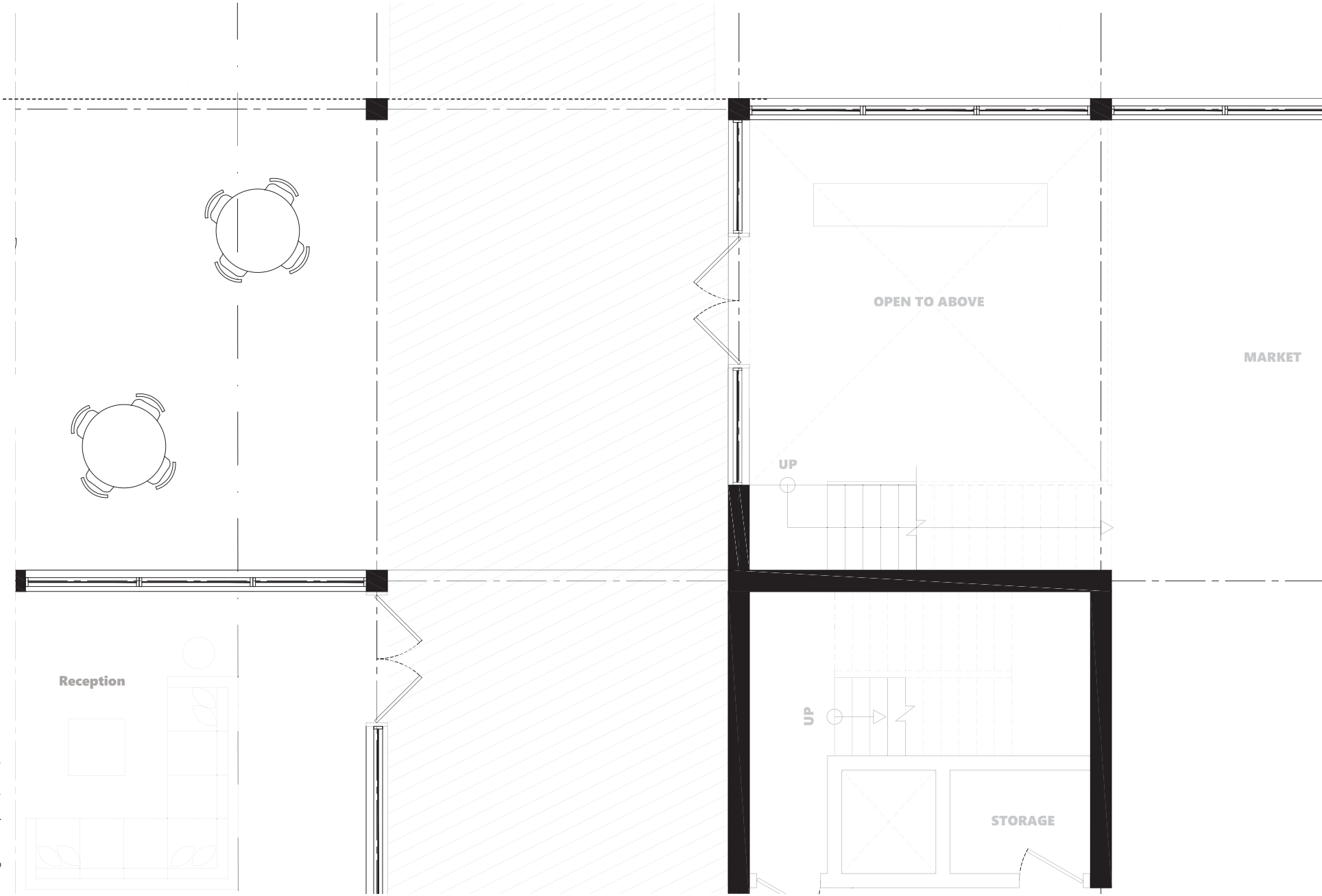
Two Bedroom Unit:
Area: 923 sqft

- 1. Foyer
- 2. Bedroom One
- 3. Living Room
- 4. Kitchen
- 5. Dining
- 6. Balcony
- 7. Primary Bedroom
- 8. Bathroom

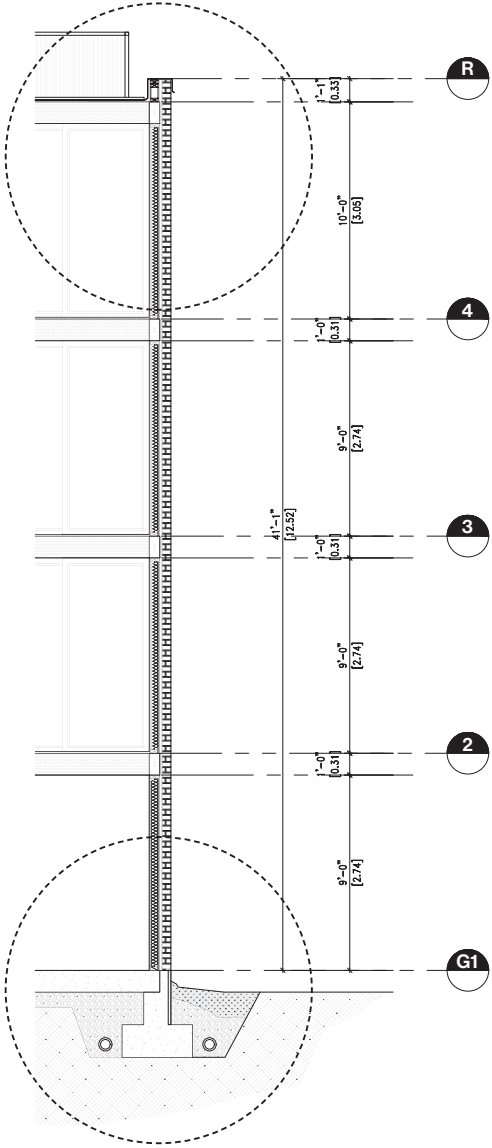




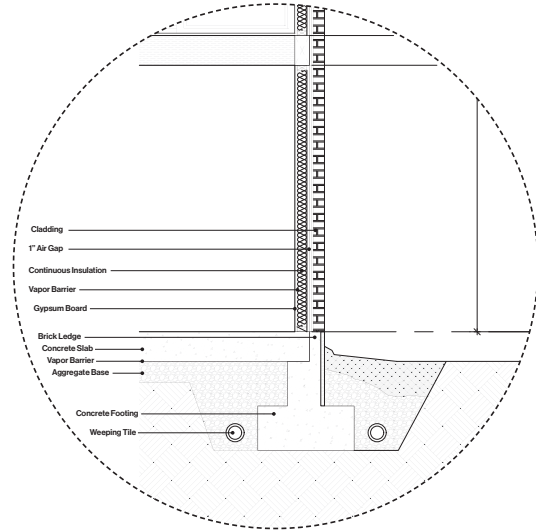




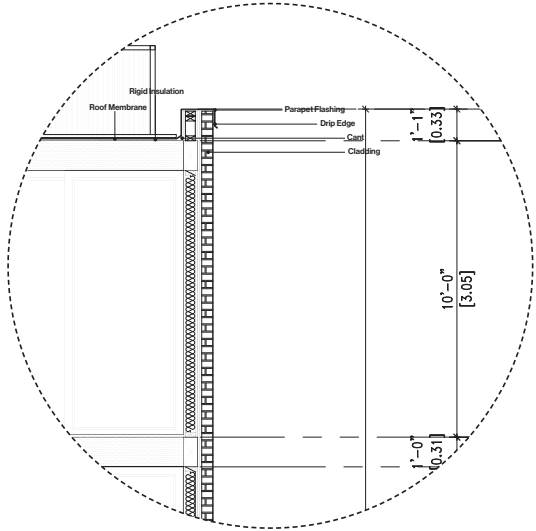




Wall Section



Foundation Close-Up Detail



Parapet Close-Up Detail

